Technische Universität Braunschweig

Cooperative Language Learning in the English as a Foreign Language Classroom:

Design and Evaluation of an Advanced In-service Teacher Training

Von der Fakultät für **Geistes- und Erziehungswissenschaften**
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This thesis is dedicated to my grandmother, Karla Stolz († March 28, 2009), my uncle, Dietmar Stolz († May 6, 2012) and my grandfather, Ernst Stolz († February 20, 2013).

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Abstract -German-

Die Dissertation stellt die Entwicklung und Evaluation eines Lehrertrainings für kooperatives Sprachlernen (KSL) in der Sekundarstufe I/II dar.

Das Training basiert auf bedeutsamen Forschungsergebnissen, etablierten Trainingsansätzen und methodischen Empfehlungen für die Fremdsprachenlehreraus- und -weiterbildung. Es umfasst sechs Trainingstage (24 Stunden), die sich über einen Zeitraum von drei Monaten erstrecken. Die Trainingsphase ist eingebettet in eine Vor- und eine Nachtrainingsphase von zehn Monaten.

Das Lehrertraining wurde mittels schriftlicher Befragungen evaluiert hinsichtlich:

- kognitiver Faktoren, die die Verwendung kooperativen Sprachlernens im Englischunterricht beeinflussen
- der Häufigkeit und Qualität der Umsetzung kooperativen Sprachlernens im Englischunterricht
- der Akzeptanz des Trainings in Bezug auf die wahrgenommene Qualität

Die Ergebnisse der schriftlichen Befragungen (Prätest, Posttest und Follow-up Test) von elf Trainingsteilnehmer/innen wurden mit denen von acht Lehrkräften verglichen, die nicht am Training teilgenommen haben. Außerdem wurde von jeder teilnehmenden Lehrkraft jeweils eine Lerngruppe zur Umsetzung kooperativen Sprachlernens im Englischunterricht befragt. Insgesamt wurden Daten von 355 Schüler/innen erhoben.

Die Untersuchungsergebnisse deuteten darauf hin, dass das Training positive Auswirkungen auf das Verständnis kooperativen Sprachlernens, die Absicht es im Englischunterricht einzusetzen und die Selbstwirksamkeitserwartung der Lehrkräfte hat. Zudem scheint das Training die Häufigkeit und Qualität der Umsetzung kooperativen Sprachlernens im Englischunterricht zu verbessern. Lehrer- und Schüleraussagen stimmten weitestgehend überein. Die Trainingsqualität wurde hoch eingeschätzt.

Die Ergebnisse bestätigen und erweitern frühere Forschungsergebnisse zu der Umsetzung kooperativen Lernens im Fremdsprachenunterricht und Trainingsansätze für kooperatives Lernen. Darüber hinaus verifizieren sie Interventionen, die erfahrungsorientierte und kognitiv-behavioristische Trainingsansätze kombinieren.

Abstract -English-

The doctoral thesis describes the design and evaluation of an in-service teacher training for cooperative language learning (CLL) at middle and secondary schools (grades 5-10/11-12).

The training is based on relevant research findings, established training approaches, and recommendations for foreign language teacher education. It comprises six days of training (24 hours) and is conducted over a period of three months. The training phase is embedded in a pre-training and a post-training phase of ten months.

The teacher training was evaluated through written surveys with regard to:

- cognitive factors that influence cooperative language learning use in the English as a Foreign Language (EFL) classroom
- the frequency and quality of cooperative language learning use in the EFL classroom
- the acceptance of the training with respect to the perceived quality

The results of the written surveys (pretest, posttest, and follow-up test) of eleven training participants were compared to a sample of eight EFL teachers who did not take part in the training. Furthermore, students from one learning group of each participating teacher were surveyed on teachers' CLL use in the EFL classroom. Altogether data from 355 students was gathered.

The results indicated that the training has positive impacts on teachers' CLL conceptions, their intentions to use CLL and their sense of personal teaching efficacy. In addition, the training seems to enhance the frequency and quality of CLL use in the EFL classroom. Teacher and student ratings were generally consistent. The quality of the training was ranked highly.

The findings support and extend previous research findings on the use of CLL in the (foreign language) classroom and teacher training approaches for cooperative learning. Furthermore, they verify forms of intervention that combine experience-oriented and cognitive-behavioral training approaches.

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1 Introduction

Due to international and national student achievement studies (especially TIMSS[1] and PISA 2000[2]) the quality of classroom instruction has become a major issue of both German educational research and policy. While previous research has mainly addressed the impact of classroom instruction on student performance, more recent studies center on classroom interaction and its contextual conditions. Teachers' instructional competencies and certain personality traits are viewed as vital components of educational improvement and therefore extensively studied.

Research findings on English as a Foreign Language (EFL) teachers' instructional behavior (e.g., DESI-study[3]) indicate a need for subject specific teacher training programs that increase the use of methods promoting learners' academic, social, and intercultural learning, supporting learner autonomy, and attending to individual learner differences. Similar goals have also been identified in European competency standards, national performance standards and county-specific curriculum standards. One concept or method in language education considered to tackle these requirements is *Cooperative Learning* (CL), which has also been labeled as *Cooperative Language Learning* (CLL) in this context[4].

Despite scientific and political demands, as well as numerous resource books and teacher training programs for CLL, contemporary research findings indicate little systematic use of CLL in German schools, especially in the EFL classroom. Drawing on these findings, it can be assumed that other forms of intervention are needed to foster German language teachers' CLL use in the EFL classroom. Consequently, this doctoral thesis presents the design and preliminary evaluation of a CLL in-service teacher training program that draws on relevant research findings and advances established beneficial training programs.

On the basis of analyses of the concept of CLL in theory, practice and research, an in-service teacher training program for German middle and secondary school EFL teachers

[1] Third International Mathematics and Science Study (Baumert, Bos, & Lehmann, 2000a,b)
[2] Program of International Student Assessment (Deutsches PISA-Konsortium, 2001)
[3] German English Student Performance International (DESI-Konsortium, 2008)
[4] CLL is used to refer to the concepts of CLL and also CL in the following to enhance readability.

(i.e., qualified to teach grades 5-10/11-12) is suggested. In doing so, perspectives on CLL from the fields of psychology, education, and language education are analyzed to achieve a better understanding of the concept, its effective use in the EFL classroom, and the design of a valuable training program.

The program aims at the improvement of teachers' CLL use in terms of frequency and quality by addressing instructional competencies and personality traits that have been found to affect CLL use.

Teacher and student surveys were utilized for a preliminary evaluation of its effectiveness. Areas tackled include teachers' cognitive and behavioral changes, and students' perceptions of EFL instruction. Furthermore, EFL teachers' sense of actual behavioral control and the perceived quality of the training were assessed.

The plan of the doctoral thesis is as follows:

Chapter 2 presents the theoretical foundations. The first section describes different CLL concepts and the CLL concept of this study. The second section specifies theories of social processes, language learning processes, and language education linked with CLL use.

Chapter 3 provides a theory- and research-based framework of instructional principles for effective CLL use. Instructional principles linked with the language learning context, the language teacher, and the language learner are described.

Chapter 4 presents the design of the teacher training. First, goals, objectives, contents and processes of established CLL teacher training programs are presented. Then, the training goals, the theoretical background, the structure, the objectives, contents and processes of the teacher training are specified.

Chapter 5 provides the research design and the data analyses methodology. It presents the purpose and research hypotheses of the study, the operationalization of variables, research design, sample, instrumentation, and procedure of data analyses.

The results of the data analyses are summarized in *Chapter 6*.

Chapter 7 discusses the findings of the study. It highlights limitations and implications of the study and directions for future teacher training programs and research.

C*hapter 8* contains references, *Chapters 9* and *10* contain lists of figures and tables.

The *Appendices (Chapter 11)* provide additional information on CLL, the CLL teacher training and the study. They also contain a compact disk that includes the supplemental materials (i.e., training materials, survey instruments, coding systems, and additional tables and figures from the data analyses).

2 Cooperative Language Learning in Theory

The term CLL has been used to refer to an instructional approach that makes extensive use of different forms of learner cooperation in heterogeneous pairs and small groups (Weinert, 1996). Apart from this general definition, CLL literature provides an ambiguous picture of underlying theories, conditions and processes, and related instructional principles (Olsen & Kagan, 1992; Sharan, 2010)[5]. A review of CLL concepts reveals at least two coexisting concepts (Johnson et al., 1999). On the one hand, CLL has been defined as a collection of classroom arrangements[6], and more precisely, as different forms of pair and group work (e.g., Schwerdtfeger, 2000). In this view, instructional techniques labeled as CLL are considered to fit into any lesson or instructional framework (Oxford, 1997). On the other hand, CLL has been typified as a method in language education that integrates various theories rooted in different areas of psychology, general education, applied linguistics, and second language acquisition (e.g., Jacobs, McCafferty, & DaSilva Iddings, 2006; Kagan & McGroarty, 1993; see also Konrad & Traub, 2008). Herein, CLL is considered as an instructional procedure used to create learning conditions that support self-directed learning (Slavin, 2006), as well as academic, social, and intercultural learning processes at the same time (Bonnet, 2009). In this view, it is often characterized as an extension of traditional group work (e.g., Weidner, 2006), an extension and specification of open instruction[7] (e.g., Meyer & Heckt, 2008), or a sub-concept of collaborative learning[8] (e.g., Richards & Rodgers, 2001).

This doctoral thesis is based on the view of CLL as an instructional procedure. The CLL concept is largely anchored in the *Learning Together* method by Johnson and Johnson (1999) that shows general suitability to language education (Johnson & Johnson, 1994a).

[5] Various conceptual frameworks have been proposed to review and classify CLL concepts. Slavin (1992) categorized concepts based on theories of learning that inform instructional principles. Johnson et al., (1999) suggested a classification based on principles of use. Finally, Slavin, Hurley, & Chamberlain (2003) distinguished concepts with regard to intended instructional goals.

[6] *Classroom arrangements* refer to instructional techniques used to structure student learning inside the classroom. In general, direct instruction, individual, pair work and group work are distinguished (Schwerdtfeger, 2003b). The German translation is "*Sozialformen*".

[7] "Open instruction" or "offener Unterricht" is an instructional approach that emphasizes active and project-based learning (see Wallrabenstein, 1997; Peschel, 2003).

[8] See Nunan (1992) for the concept of collaborative learning.

This method has also been chosen because it seems to be more effective in increasing student achievements than CLL methods that define CLL as a collection of pair and group work techniques (Johnson & Johnson, 2002). Besides, it provides a conceptual framework to realize the principles of C*ommunicative language teaching* (Richards & Rodgers, 2001), and it is congruent with essential features of quality of instruction (Helmke, 2009).

To meet the requirements of the German EFL classroom the method has been extended and specified by theoretical and practical issues inferred from language education[9].

The structure of the following description of the CLL concept rests upon a modification of a framework by Richards and Rodgers (2001). Their model classifies approaches and methods in language education with regard to their theoretical background (i.e., linguistic and psycholinguistic theories) and associated teaching principles and practices (i.e., objectives, techniques and behaviors). Along with this framework, the theoretical background of CLL is presented with reference to selected theories of: a) social processes, b) language learning processes and c) language education[10]. These three dimensions need to be considered as intertwined as all three reflect general premises of the method.

Figure 1 summarizes the theoretical dimensions of the CLL concept of this thesis.

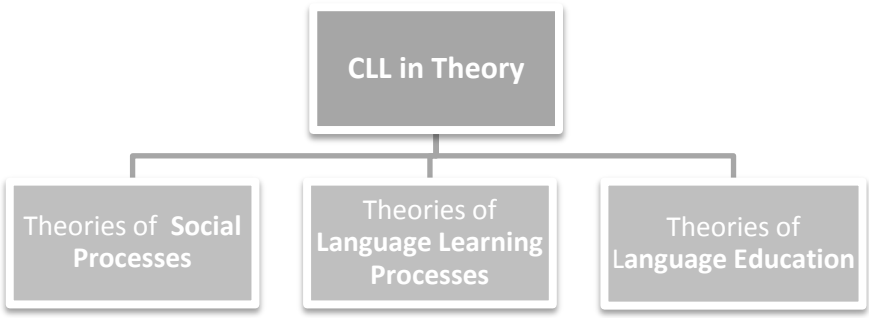

Figure 1: CLL in Theory

[9] See Haß (2010) for methodological decisions in foreign language education.

[10] Theories have been chosen in view of their significance for the development of theory-based knowledge as well as instructional and verbal behavior for effective CLL use in the EFL classroom. Therefore, theories of language learning processes and language education are limited to distinct ones that focus on learners' communicative interaction rather than form-focused instruction, and explain how CLL draws on current goals of EFL education.

2.1 Theories of Social Processes

Various theories have been used to illustrate essential learning conditions in CLL. Explanations usually stress relationships and patterns of interaction among learners and between learners and teachers. At least three perspectives can be distinguished.

The first perspective draws attention to the need of social cohesion among learners. Related theories originate in social psychology, especially group psychology and group dynamics, and include works by Lewin (1935, 1963), Deutsch (1949), and Johnson and Johnson (1989). Based on Lewin's (1935, 1963) theorizing and research, Deutsch (1949) proposed the *Social Interdependence Theory (SIT).* According to the *SIT*, the way individuals perceive the interactional context in social situations leads to certain interpersonal interaction patterns. If goal-attainment efforts are perceived as positively interdependent, resulting interpersonal interaction patterns can be typified as mutually supportive or cooperative. Interpersonal interaction patterns can be characterized as competitive or obstructive toward each other's success if goal-attainment efforts are perceived as negatively interdependent. If there is no interdependence, there is no interaction among individuals and the situation is individualistic in nature. Building on the *SIT*, Johnson and Johnson (1989) made the premise that the way goals or interdependence among individuals is structured in a situation impacts on interaction patterns and outcomes. The researchers operationalized the concepts of positive interdependence and promotive interaction into five instructional principles for structuring interaction among learners: positive interdependence, individual accountability, promotive interaction, social skills, and group processing. These so-called *five basic elements* are the basis of the *Learning Together method* that involves the application of all three types of interdependence (i.e., individual, competitive, and cooperative) and has been empirically validated in different educational contexts (Johnson & Johnson, 2005).

In summary, this perspective holds that social cohesion is essential for CLL to be effective as it fosters learners' intrinsic motivation to maximize their own and others' learning.

Social cohesion can be promoted through systematic use of specific instructional principles[11].

The second perspective gives emphasis to the need of self-directed learning by every learner. Related theories are founded in humanistic psychology and theories of second language acquisition. In accordance with Rogers' (1969, 1974) theorizing, learning in CLL has been characterized as a self-directed social process that involves the whole learner as a unique cognitive and emotional being and leads to the development of an individual learner's self-concept and a personal picture of reality. Furthermore, learning defined as psychological growth has been seen to rely on positive interpersonal relationships and empathetic understanding.

Along with Rogers' (1969) concept of *student-centered learning*, Krashen's *Affective Filter Hypothesis* (1985) may be highlighted in this context as it emphasizes non-threatening learning environments that support self-regulated language learning and prevent failure and anxiety. Both approaches imply individualized learning through learning tasks that address different learning styles, and teachers' instructional actions that promote learners' cognitive, metacognitive, affective, and social learning.

In sum, this perspective on CLL highlights that individualized learning in a non-threatening environment is an innate component of CLL that determines its effectiveness. In line with the theorizing, individualized learning in CLL can be fostered if teachers adopt a humanistic approach toward language education and use related instructional principles[12].

The third perspective stresses the need to use diversity as a tool and a resource of learning. Related theories are founded in multicultural (Bennett, 1990) and intercultural education (Gogolin, 2003). According to the theorizing the learning process involves explicit learning about learners' own cultural background, other cultures, as well as implicit learning about similarities and differences in attitudes, beliefs, values, and traditions of their own and the other cultures through classroom arrangements that foster interaction and exchange (Gogolin, 2003). CLL has been held to be a suitable

[11] See Dörnyei (1997) as well as Ehrmann and Dörnyei (1998) for the link of CLL and group dynamics. See also Dörnyei and Murphy (2003) for group dynamics in the language classroom.
[12] See Jacobs, McCafferty, and DaSilva Iddings (2006) for the relation of CLL and humanistic psychology.

instructional setting as it uses learner diversity as a tool and a resource for instruction and therefore provides an ideal setting for the development of linguistic and socio-cultural competencies (Holt, 1993).

In sum, this view highlights the instrumental use of diversity to directly and indirectly foster linguistic and socio-cultural learning[13].

2.2 Theories of Language Learning Processes

Various theories are considered to explain language learning processes in CLL. Explanations typically attend to visible and invisible changes within and among learners, as well as their stimulation. Most of these theories are founded in learning psychology. Three views can be distinguished.

The first view deals with the concepts of habit formation and vicarious experience. Theories related to the concept of habit formation are rooted in behaviorists' views on learning[14], more specifically, Skinner's *Theory of operant conditioning* (1938, 1953). The concept of vicarious experience is based on Banduras (1986) *social learning theory*. Related instructional principles have been used to promote academic, social, and intercultural learning processes of individuals and groups. Johnson, Johnson, and Holubec (1998) applied the principles on the level of individual learners. Intended academic and social outcomes are modeled by the teacher and mainly promoted through positive reinforcement and ignoring. Academic and social learning take place simultaneously as learners imitate other learners' appropriate behavior which has been reinforced by the teacher. Slavin (1995) applied the principles on the group level. He affirmed that learners' performance outcomes and their use of social skills can be advanced by creating an interpersonal reward structure. Groups are rewarded based on group performance, which is determined by the sum of individual performances. In doing so, a mutual goal is established that encourages learners to support other group members' efforts to learn. Consequently, learners are more likely to give and receive social reinforcement such as praise and encouragement which, in turn, strengthen their efforts to learn.

[13] See Allan (2006) for an example of cultural learning in CLL.

[14] Learning is defined as an unintentional process, in which an individual's behavior changes over time as a result of its consequences (Omrod, 2006).

Overall, this perspective on CLL stresses the use of habit formation and vicarious experience through instructional principles to foster language learning processes (see also Chap. 3).

The second view concerns invisible mental changes (i.e., information processing, storage, and retrieval). Related theories are rooted in cognitive-developmental and cognitive theories of learning. Consistent with Piaget's (1976) theorizing, learning in CLL has been considered to rely on learners' active resolution of cognitive conflicts. Cognitive changes, that is, linkage of new to old concepts or adjustment of patterns to accommodate new information, have been seen to result from the resolution of these conflicts. In the process of conflict resolution, learners explain information to each other and discuss different views. These information processing strategies have also been labeled as elaboration, a cognitive learning strategy that allows a deeper understanding in addition to better retrieval and storage (Renkl, 1997)[15].

Consistent with cognitive theories of learning, self-questioning strategies have been used to develop metacognitive skills. Johnson et al. (1998) applied the instructional principles at the individual and the group level to promote problem solving and to evaluate learning processes[16].

In sum, this perspective on CLL highlights mental changes through the resolution of cognitive conflicts, elaboration, and self-questioning strategies, and their support via instructional principles[17].

The third view draws attention to the concept of mediation in CLL. Related theories originate in constructivists' theories of learning and some theories of language acquisition. Consistent with Vygotsky's (1978) theorizing, learning has been considered to occur as learners create cognitive and emotional images of reality through social interaction and assistance. While giving and receiving academic and social support, language learning is fostered as learners receive comprehensible input from other learners (Krashen, 1985), produce output (Swain, 2005), and modify their language to

[15] See Oxford (1990) for a description of elaboration as a language learning strategy.

[16] Instructional principles used are similar to steps involved in Meichenbaum's model of self-regulated learning (1977).

[17] See Jacobs and McCafferty (2006) for the use of language learning strategies in CLL and Johnson et al., (1998) for the use of self-questioning strategies in CLL.

provide comprehensible input for other learners (Long, 1996). Related instructional principles have been utilized to foster mediation by teachers and learners. Gillies (2007) provided a range of instructional principles that can promote learners' thinking and learning in CLL (see also Johnson et al., 1998). Teachers model private speech during whole-class instruction and use certain verbal strategies when intervening. Instructional techniques, such as *Reciprocal Teaching* (Palinscar & Brown, 1984) or *Constructive Controversy* (Johnson & Johnson, 1992, 1994c) can be utilized to encourage learner discourse in CLL groups[18].

In summary, this view on CLL highlights learning from each other via mediation, its benefits on thinking, learning and discourse, and how it can be fostered (see also Chap. 3).

2.3 Theories of Language Education

Language learning goals of CLL have been adjusted to developments and trends in (foreign) language education. Until the end of the 20th century, CLL was usually considered as an approach that aids foster learners' *communicative competence* (*CC*) (Coelho, 1992; see also Fathman & Kessler, 1993)[19]. Related theories including Piepho's theorizing (1974) on *CC* as the superordinate goal of English classes are largely based on the theories by Hymes (1972) and Habermas (1971) which stress the significance of socio-pragmatic skills. In line with a *CC* framework by Canale and Swain (1980), four competencies were addressed:

1) *Grammatical competence (*i.e., the knowledge of lexical items and rules of morphology, syntax, sentence-grammar semantics, as well as phonology)
2) *Sociolinguistic competence* (i.e., the knowledge of socio-cultural rules)
3) *Discourse competence* (i.e., the knowledge of discourse rules, as well as the ability to connect sentences to produce meaningful utterances)
4) *Strategic competence (i.e.,* verbal and non-verbal strategies used to cope with language deficits) (pp. 29-31).

[18] See also Davidson and Worsham (1992) for other approaches.

[19] Since the 1970s the emphasis of language education has been on appropriate language use in social interaction or the development of *CC* (Legutke, 2010).

Recent works consider CLL as an approach that fosters learners' *intercultural communicative competence* (*ICC*) (Bonnet, 2009; see also Finkbeiner & Koplin, 2002)[20]. In contrast to *CC*, the concept of *ICC* implies additional cognitive and socio-cultural competencies that enable learners to interact with people from different linguistic and cultural backgrounds (Hu & Byram, 2009).

Based on the four linguistic competencies associated with the concept of *CC*, (Canale & Swain, 1980), Byram (1997) proposed a model for teaching and assessing *ICC* in the school context. The model includes the following five competencies:

- *Attitudes* (i.e., general curiosity, openness, and willingness to change beliefs about one's own and the target culture)
- *Knowledge* (i.e., the knowledge of products, practices, and perspectives of one's own and the target culture)
- *Skills of interpreting and relating* (i.e., the ability to understand practices in the target culture, as well as to relate them to one's own)
- *Skills of discover and interaction* (i.e., the ability to acquire new cultural knowledge)
- *Critical cultural awareness* (i.e., the ability to evaluate information, pp. 50-54)[21]

In summary, this perspective on CLL places emphasis on the goals of (foreign) language education and related competencies, including *CC* and related competencies, as well as *ICC* and related competencies[22].

The next chapter specifies how theories linked with CLL have been put into practice and validated by empirical research.

[20] At the end of the 20th century, the goal of language education in Europe has been adjusted to increasing multilingualism and multiculturalism by adding a socio-cultural dimension to the primarily linguistic view of proficiency. Language education in Germany is based on guidelines released in the *Common European Framework of Reference for Languages (CEFR)* (Council of Europe, 2001), national performance standards (KMK, 2003, 2004) and state-specific curriculum-standards (e.g., NK, 2006a,b). These documents identify *intercultural communicative competence* (ICC) as the current goal of language education (Hu, 2010).

[21] Models of *ICC* in foreign language education (e.g., Caspari & Schinschke, 2007; see also Doyé, 1999) are generally based on Weinert's (2001) conceptual definition of competence. Common components of *ICC* models include knowledge, skills, and attitudes. However, related competencies differ among models and curricula (see Göbel and Hesse (2004) for different models of *ICC* and curricular differences in Germany).

[22] See Stengel (2007) for the development of *ICC* through CLL in postsecondary and professional education.

3 Cooperative Language Learning in Practice and Research

Frameworks for effective CLL use are predominantly based on associated theories (see Chap. 2) and empirical research findings. Variables include instructional, curricula, institutional and personal factors (e.g., A.A. Huber, 1999). Hertz-Lazarowitz (2008) gave emphasis to six interrelated variables: classroom organization, learning task, teacher's instruction and communication, as well as pupil's academic and social behavior (pp. 44-48; see also Hertz-Lazarowitz, 1992).

This chapter provides an overview of instructional principles for effective CLL use by drawing on this framework and relevant related research findings[23]. Variables have been organized into three interrelated categories:

1) the context (i.e., language learning conditions and language learning tasks)
2) the language teacher (i.e., instructional behavior, verbal behavior, and cognitions)
3) the language learner (i.e., goal preferences, preparedness, and verbal behavior)

Figure 2 illustrates the relationship of variables that impact on effective CLL use.

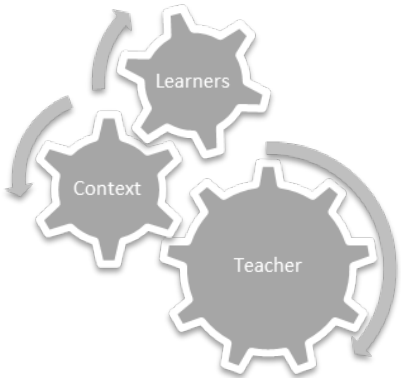

Figure 2: Variables Linked with Effective CLL Use

3.1 The Language Learning Context

A number of instructional principles put CLL theory into practice. Those associated with the context give emphasis to *language learning conditions and language learning tasks*.

[23] Instructional principles and mediating factors of teachers' CLL use are deduced from single studies and series of studies (i.e., laboratory as well as experimental and quasi-experimental field-studies) conducted inside and outside the language classroom (i.e., foreign and second language, as well as bilingual and other educational settings). The studies took place in elementary schools, high schools, and universities in Germany, other European countries, North America, Asia, the Middle East, and Australia. The criterion for inclusion was the use of team-based methods in educational settings, in particular the utilization of procedural CLL methods (e.g., *Learning Together*).

They stress mutual tasks, on-task interaction, supportive behavior, learner interdependence, and individual responsibility (Brody & Davidson, 1998a).

At least five principles for structuring *language learning conditions* can be distinguished. In keeping with *SIT* (see Chap. 2.1), Johnson and Johnson (1999) proposed five instructional principles labeled as *five basic elements of CL*[24]. These principles can be further specified in terms of connected language learning principles (Kagan & McGroarty, 1993). Accordingly, the basic elements of CLL[25] can be characterized as follows:

Basic Element One: Positive Interdependence (i.e., structuring group goals)

Positive interdependence deals with instructional principles that are utilized to increase social cohesion, that is, learners' perceptions to only be successful as a group in which everyone contributes and understands the subject matter. Johnson et al. (1998) presented nine types of positive interdependence (see Table 10 in App. A) and related instructional behavior. A mutual goal (i.e., *positive goal interdependence)* needs to be integrated into any task and should be supplemented by at least two other types of positive interdependence (Johnson et al., 1998; see also Lotan, 2003). If *basic element one* is established, language learners are exposed to and produce various language forms in a natural setting. In addition, they negotiate meaning to ensure mutual understanding.

Basic Element Two: Individual Accountability (i.e., structuring responsibility)

Individual accountability deals with instructional principles applied to ensure language learners' on-task behavior by holding each group member responsible for the group product. Instructional principles include the assignment of roles, randomized checking for understanding and mastery, and others. If *basic element two* is established, language learners produce output related to communication needs.

[24] The five basic elements as well as associated instructional principles are often considered as the main difference between traditional forms of pair and group work and CLL (Huber, 1991). In contrast to CLL, traditional forms of group work (E. Meyer, 1996; see also Schwerdtfeger, 2003a) largely built on theories of learning and teaching anchored in general education and applied linguistics. These methods are often less structured.

[25] In this thesis, the five basic elements proposed by Johnson et al. (1998) are labeled as *five basic elements of CLL* to highlight the adaptation to the language classroom.

Basic Element Three: Face-to-Face (promotive) Interaction (i.e., structuring proximity)

Face-to-face promotive interaction gives emphasis to instructional principles that are used to ensure supportive verbal and non-verbal behavior among language learners by structuring proximity. Instructional principles involve the close seating of group members, small groups (two or three learners), and short group work periods. If *basic element three* is established, language learners have opportunities to use verbal and non-verbal language forms.

Basic Element Four: Social Language Skills (i.e., promoting social language skills)

Social language skills deal with instructional principles that are applied to promote simultaneous use of social competencies and appropriate language in real-life situations. Teaching social language skills involves a five-step procedure of direct instruction, practice, and evaluation. Skills are selected with regard to the learners' level of social competencies and language proficiency (Johnson & Johnson, 1994b; see also App. B1). If *basic element four* is established, language learners acquire language functions and social competencies in authentic situations.

Basic Element Five: Group Processing (i.e., evaluating group products and processes)

Group processing concerns instructional principles that are utilized to improve learners' academic and social performance by evaluating group products and group processes, and by setting improvement goals. Instructional principles include a four-step procedure. Language learners receive feedback from other learners and the teacher, and provide positive feedback on social and academic performance, analyze the feedback, set improvement goals, and celebrate their work. If *basic element five* is established, language learners connect new with old information and practice self-regulated learning.

Instructional principles of most acknowledged CLL methods have been validated by empirical research (Johnson et al., 1999 for an overview). For the most part, these validations include conceptual or meta-analytical research reviews. An early meta-analysis by Johnson and Johnson (1989) presented findings from 521 studies to validate *SIT* and related concepts (see Chap. 2.1). The results showed that CLL was superior to competitive and individualistic learning under the conditions of heterogeneous grouping,

positive interdependence and individual accountability, face-to face promotive interaction, and the use of social skills. The study provided evidence that CLL promotes higher achievement, retention, higher-level reasoning, process gain, transfer of learning content, positive attitudes toward the learning subject, and time on the task. Besides, CLL increased the quality of interpersonal relationships and psychological health, especially when CLL was operationalized on the basis of *SIT* and related concepts, and the methodological quality of the study was high.

A more recent meta-analysis of 158 studies examined the level of effectiveness of eight CLL methods[26] on student achievement and features that characterize more effective methods (Johnson and Johnson, 2002). Features that influenced effectiveness were identified by evaluating CLL methods on the basis of five dimensions[27] using a five-point scale from easy to difficult. In addition, the methods were categorized on a continuum from direct (i.e., CLL techniques) to conceptual (i.e., CLL procedures) models. When compared to competitive and individualistic learning, all tested CLL methods were found to produce significantly higher achievement scores (i.e., effect sizes). Tentative rankings of CLL methods by effect sizes and by the number of comparisons available indicated that *Learning Together, Group Investigation*, and *Academic Controversy* were more effective in promoting achievement than S*tudent-Teams-Achievement-Divisions (STAD)*, *Teams-Assisted-Individualization (TAI)*, *Jigsaw*, *Cooperative Integrated Reading and Composition (CIRC)*, and *Team-Games-Tournaments (TGT)*. Based on correlations between method categorization scores and effect sizes for achievement, conceptual models (i.e., CLL as a procedure) were found to have a greater impact on student achievement than direct methods (i.e., CLL as a technique). Johnson and Johnson (2002) concluded that established CLL methods and other conceptions are not equally effective and further research is needed.

[26] The criterion for inclusion was that the study empirically tested the effects of a specific method on student achievement. CLL methods included were: *Learning Together*, *Teams- Games-Tournaments (TGT)*, *Group Investigation (GI)*, *Constructive Controversy*, *Jigsaw*, *Student Teams Achievement Divisions (STAD)*, *Team Accelerated Instruction (TAI)*, and *Cooperative Integrated Reading & Composition (CIRC).*

[27] Dimensions included: a) ease of learning the method, b) ease of initial use in the classroom, c) ease of long-term maintenance of use of the method, d) robustness of the method (i.e., applicability to a wide variety of subject areas and grade levels), and e) adaptability of method to changing conditions (p. 10-11).

CLL task design in the German EFL classroom largely depends on performance standards (see *Excursus: German performance standards and CLL techniques and procedures*, p. 18). In order to develop language learners' *ICC* (see Chap. 2.3), *three types of task* can be utilized that vary in content (i.e., linguistic forms, functions, interaction). A CLL task can be defined as an activity that combines language learning content and a suitable CLL method[28]. Each one of the three types of task emphasizes a specific competence or set of competencies[29]. Instructional principles include the selection of content and a suitable CLL method to accomplish distinct competencies (Sharan, 2010).

The *first type* focuses on the mastery of knowledge (e.g., phonological or grammatical units). This type adopts the structural view of language and the nature of language proficiency. Along with this view, language is "a system of structurally related elements for the coding of meaning" and language proficiency is the "mastery of [these] elements" (Richards & Rodgers, 2001, p. 20). A suitable CLL method is the *Structural Approach* (Kagan, 1993; Kagan & Kagan, 1994,). This method offers various CLL techniques that can be used to support learners' mastery of distinct information and linguistic skills.

The *second type* gives emphasis to social skills and appropriate language use in interpersonal communication. It draws on the functional view of language and language proficiency. In this view, language is defined as "a vehicle for the expression of functional meaning" (Richards & Rodgers, 2001, p. 21). Language proficiency is appropriate language use in social situations[30]. A suitable CLL method is the *Learning Together* method (Johnson & Johnson, 1994b). This method highlights the use of social skills and interpersonal communication (Sharan, 2010). In line with this method, teaching social skills involves a five-step procedure:

- *Step 1*: Illustration of the need of the skill (e.g., in role plays)
- *Step 2*: Operationalization of the skill into language forms and gestures by using a T-chart with two categories (i.e., "Looks like" and "Sounds like")

[28] See also Grieser-Kindel, Henseler and Möller (2009) for a similar definition of CLL tasks.

[29] A similar classification has been proposed by S. Sharan (2002) who classified the most researched CLL methods into three subgroups based on the competencies given emphasis to.

[30] Related approaches in language teaching such as *Communicative Language Teaching* focus on systematic training of functional categories in real-life situations (Brown, 2007).

- *Step 3*: Performance of the skill in isolation (e.g., in role plays)
- *Step 4*: Practice of the social skill in CLL activities and evaluation of use
- *Step 5*: Ongoing practice and evaluation until the skill is used habitually (Johnson et al., 1998)[31]

The *third type* stresses interactional competencies, including patterns of discourse and interaction. It is founded on the interactional view of language and language proficiency. Consistent with this view, language is "a vehicle for the realization of interpersonal relations and for the performance of social transaction between individuals" (Richards & Rodgers, 2001, p. 21). Language proficiency is the integrated use of linguistic, socio-cultural, and cognitive competencies in interaction to create and maintain relationships. A suitable CLL method is the *Learning Together* method. This method places emphasis on the integrated use of competencies in real-life situations and stable, supportive relationships among learners (Johnson & Johnson, 1999). It also provides a framework for teaching different contents (e.g., grammar, language learning strategies, and socio-cultural knowledge), for providing close and open-ended tasks, for individualized and self-directed learning and assessment, for producing and receiving language in real life-situations, and for negotiation of meaning. Relationships among learners are established through different group arrangements that serve different purposes and vary in length. Group arrangements include formal, informal, and base groups. Formal CLL groups work together for a period of several lessons to complete a specific task (e.g., learning vocabulary or conducting a project). Informal CLL groups stay together for a period of time ranging from a few minutes to one whole lesson. Learners are often engaged in discussions to either complete tasks that lead to a new topic or to review materials previously taught. Cooperative base groups are formed for one school year to provide each other with academic (i.e., discussing academic progress and setting goals) and social (i.e., providing help and assistance) support. Base group members meet daily in elementary school and twice a week in secondary school to discuss their learning processes (Johnson & Johnson, 1999).

[31] Due to similarities of language functions and social skills (Coelho, 1992), social skills are sometimes labeled as *social language skills* in language education (Farrell & Jacobs, 2010). Also, the CLL learning environment is considered to provide rich opportunities for natural language use and practice of social language skills (Fathman & Kessler, 1993).

The significance of authentic and well-structured tasks to foster achievement and to reduce learners' off-task behavior has also been validated by empirical research (Renkl, Gruber, & Mandl, 1996). Instructional principles for structuring goal-oriented and condition-oriented tasks have been inferred from narrative reviews and single studies. An example is a narrative research review by Cohen (1994a). In this review, CLL effectiveness was defined as productive group work and considered to rely on task-design, that is, the way interaction and discourse patterns, strategy use, and instructional objectives are structured. The results indicated that particular types of tasks are more effective to accomplish certain instructional goals than others[32].

In summary, the section above indicated how the conscious implementation of the five basic elements of CLL and structuring CLL tasks can impact on CLL effectiveness.

Excursus: German performance standards and CLL techniques and procedures

The content and organization of EFL instruction in Germany is determined by national performance standards (KMK[33], 2003, 2004) and state-specific curriculum standards (NK[34], 2006a,b) that are founded on European competence standards released in the *Common European Framework of References for Languages* (Council of Europe, 2001). These standards specify the content of instruction, its organization, instructional principles, and expected outcomes.

Current performance standards for middle schools in Lower Saxony describe the integrated use of *functional communicative competencies*, *intercultural competencies*, and *strategic competencies* as the main goal of EFL education (NK, 2006a, and b). Competencies under the first category stress communicative skills and linguistic devices. They involve product-oriented objectives which focus on receptive (i.e., listening and reading) and productive (i.e., speaking and writing) skills, as well as linguistic forms and functions. The second and third categories emphasize socio-cultural and strategic competencies. They involve process-oriented objectives which address learning behaviors

[32] Cohen (1994a) stated that conceptual learning involves open tasks that have more than one right answer, require cooperation and instructional objectives that provide opportunities for the use of different strategies. In contrast, routine learning involves tasks that could also be completed by individual learners, require the use of distinct skills and strategies, and allow one right answer.

[33] abbreviation of "Kultusministerkonferenz", a national institution that passes normative guidelines

[34] abbreviation of "Niedersächsisches Kultusministerium" or "Ministry of Education"

and abilities (e.g., socio-cultural awareness or language learning strategies) needed to understand and produce linguistic input and output, and to interact in the target language appropriately. On the basis of these standards, schools are required to develop and implement class level specific objectives, and to document ways in which they direct student achievement.

CLL provides a flexible framework that allows the integrative use of different instructional techniques and procedures to accomplish numerous instructional goals (Bejarano, 1994). CLL can thus be used as a framework to develop learners' *Intercultural Communicative Competence* (Bonnet, 2009) and related competencies via product-oriented and process-oriented learning objectives identified in current performance standards for EFL teaching at German middle schools.

Table 1 shows how CLL techniques and procedures relate to EFL performance standards.

Table 1: EFL Performance Standards and CLL Techniques and Procedures

Functional Communicative Competencies	Product-oriented CLL Techniques

Communicative Skills
• Listening and Listening/Visual Comprehension
• Reading Comprehension
• Speaking
  ○ engaging in conversations
  ○ coherent speaking
• Writing
• Mediation
	Access to Linguistic Devices
	• Vocabulary
	• Grammar
	• Pronunciation and Intonation
	• Orthography

Intercultural Competencies	Product-oriented and Process-oriented CLL Procedures
• socio-cultural orientation knowledge • sensitive dealing with cultural difference • practical coping with intercultural encounters	
Strategic Competencies	
• text reception (reading comprehension and listening comprehension) • interaction • text production (speaking and writing) • learning strategies • presentation and media use • learning awareness and learning organization	

(KMK, 2003, p. 11; KMK, 2004, p. 9; see also NK, 2006 a, and b, p. 10)

Research studies have indicated positive effects of CLL on the acquisition of different competencies. It has been found to promote academic and social learning as well as tolerance and the acceptance of academic, linguistic, and cultural diversity (e.g., Johnson & Johnson, 2009; see also Chap. 3.3)[35].

So far rather little research on CLL use in language education has been conducted. Only a few of the earlier studies explicitly refer to CLL methods and related concepts (Akcan, Lee, Ghaith, & Jacobs, 2006)[36]. Recent studies usually focus on CLL and make use of different techniques. Most studies have examined CLL effectiveness in different settings by comparing CLL methods and other instructional approaches. The results indicate positive effects of different CLL methods on (functional) communicative competencies (i.e., communicative skills and linguistic knowledge). For example, a recent study by Talebi and Sobhani (2012) investigated the impact of different CLL techniques (e.g., Think-Pair-Share) on EFL learners' (N =40)[37] oral proficiency. The learners were randomly assigned to either a control or an experimental group. Learners were at the same level of oral proficiency before the intervention. Interviews conducted on the posttest indicate a significant higher improvement of speaking skills in the experimental group than in the control group.

Bejarano (1987) examined the impact of *Discussion Group, Student Teams-Achievements Divisions* and direct whole-class instruction on listening and reading comprehension, as well as grammar and vocabulary in 33 seventh-grade EFL classrooms in three junior high schools (N = 655) in Israel[38]. The results indicated significantly greater improvement in the two CLL settings than in the direct whole-class setting. Learners in the CLL groups scored significantly higher on the total test and on the listening comprehension scale.

A study by Shaaban (2006) investigated the effects of *Jigsaw* and direct whole-class instruction on reading comprehension, vocabulary acquisition, and motivation to read of

[35] See McGroarty (1989) for a theoretical perspective on benefits of CLL instruction.

[36] See Akcan et al. (2006) for a bibliography of CLL research in second language education as well as McGroarty (1993) for earlier studies on group work in second language learning.

[37] The participants of the study were 40 male and female adult learners who studied for the IELTS speaking sample test at the IELTS Center in Mashad, Iran.

[38] The classes were taught by 18 language teachers who had participated in a CLL workshop and in-class coaching prior to the study. They were randomly assigned to one of the three conditions. Students' achievement was evaluated by observation and by achievement tests that included two integrative tests (i.e., listening and reading comprehension) as well as a discrete-point grammar and a vocabulary tests, and were conducted in a pre-post design.

44 fifth-grade EFL students at a private school in the Lebanon[39]. The results indicated a significant group difference in reading performance. Learners in CLL scored higher on overall motivation to read[40] than control group learners. There were no significant differences on reading comprehension and vocabulary acquisition.

Another study investigating the effects of *Student Teams Achievement Divisions* (*STAD*) and *Group Investigation* (*GI*) at the college level indicated positive effects on reading comprehension (Jalilifar, 2010). *STAD* was found to enhance EFL learners' reading comprehension while no significant effects were found for *GI*.

Positive effects of CLL on reading achievement in English were also found in the *Bilingual Cooperative Reading and Composition (BCIRC)* program in North America. The program combined instructional principles suggested by the *Cooperative Integrated Reading* (*CIRC*) method and other instructional strategies rooted in first and second language acquisition as well as literacy development for Spanish-speaking minority students (Calderón, 1990; see also Calderón, Hertz-Lazarowitz, & Slavin, 1998)[41]. 85 third-grade students (*n* = 52 for *BCIRC* and *n* = 33 for control) were tested[42].

Ghaith and Yaghi (1998) assessed the effects of *Student Teams-Achievement Divisions* and an individualistic textbook-based instructional approach on the acquisition of linguistic rules and procedures of fourth, fifth, and sixth-grade ESL students (*N* = 318) at one junior high school in the Middle East[43]. No significant differences were found. The results indicated that low-achieving learners seemed to benefit more than high-achievers in the CLL settings. However, high-achieving learners in the CLL settings performed as well as high-achievers in the control groups.

A current Iranian study also investigated the acquisition of grammatical competence of high-achievers and low-achievers in a CLL class and a class in which the *Grammar*

[39] The study had a posttest-only control group design.

[40] Reading motivation has been defined in terms of the perceived value of reading and reading self-concept.

[41] It aimed at promoting Spanish and English reading, writing, and language achievement of second and third-grade Spanish-speaking students with limited English proficiency.

[42] The comparison group was taught by using the *Roundrobin* technique for oral exercises and workbooks for practice activities.

[43] Students were randomly assigned to experimental and control conditions, and linguistic knowledge was pretested and posttested.

Translation method was used (Ghorbani & Nezamoshari'e, 2012)[44]. The findings showed that grammar achievements of experimental group learners were higher than of control group learners. High-achievers and low-achievers equally benefited in CLL.

3.2 The Language Teacher

Competencies and personality traits of language teachers that impact on effective CLL use have been considered in different ways and emphasized to different extents. Three aspects can be specified: teachers' *instructional behavior*, *verbal behavior*, and *cognitions*.

With regard to *instructional behavior*, language teachers' ability to structure CLL lessons has been stressed. Appropriate behavior has often been identified on the basis of instructional implications deduced from CLL theory. The implications have been presented by means of teacher roles taken before, during, and after formal instruction (e.g., McDonell, 1992)[45]. Appropriate behavior has also been inferred from research findings (e.g., Haag, Fürst, & Dann, 2000).

In line with CLL theory and research, lessons in which team-based methods are used include direct whole-class instruction and group work or problem-solving situations. In "traditional" group work, three major phases and two intermediate phases can be distinguished (Haag, 1999; see also Lehman-Gruber, 2000)[46]. CLL lessons basically have the same structure, but differ in teachers' instructional behavior[47]. Instructional behavior during the *presentation phase* includes the presentation of the task, required concepts and strategies[48], the criteria of success, a time limit, and assignment to small heterogeneous groups. In addition, the five basic elements of CLL are structured into the task (Chap. 3.1). During the *assurance phase*, teachers check for heterogeneous grouping,

[44] 64 female Iranian university students (i.e., freshman) were tested on the acquisition of ten grammatical forms. CLL techniques used included *Student-Teams Achievement Divisions* (*STAD*), *Think-Pair-Share*, *Roundtable* and *Numbered Heads*.

[45] McDonell (1992) described instructional behavior in CLL with regard to five roles taken, including the teacher as an inquirer, creator, observer, facilitator, and change agent (pp. 164-171.).

[46] Lessons start with a *presentation phase*. It is followed by an intermediate phase labeled as *assurance phase*. During the following *practice phase*, learners complete the task. The *practice phase* ends with another intermediate phase, the *ending phase*. Lessons end with an *evaluation phase*.

[47] The basic lesson format of the *Learning Together* method also includes base group meetings at the beginning and at the end of a lesson (Johnson and Johnson, 1999).

[48] Presentations of concepts and strategies also involve pre-teaching of new words (Jacobs & Goh, 2007).

understanding of the task, and availability of materials[49]. The *practice phase* involves monitoring to ensure on-task behavior and to collect data on learners' academic and/or social performance with structured observation forms. Social reinforcers such as nodding when learners show appropriate behavior are also used. Teacher interventions are limited to task and interpersonal assistance. During the *ending phase* the remaining time is announced and an acoustic signal is used to indicate the end of the phase. The *evaluation phase* involves assessment of learners' academic and social learning. Results are summarized and new concepts are connected to old information. Moreover, group processes are evaluated and improvement goals are set by using structured oral or written techniques (see App. B1). The completion of the task is celebrated at the end of CLL lessons (Johnson et al., 1998)[50].

Figure 3 presents the structure of a CLL lesson and language teachers' instructional behavior.

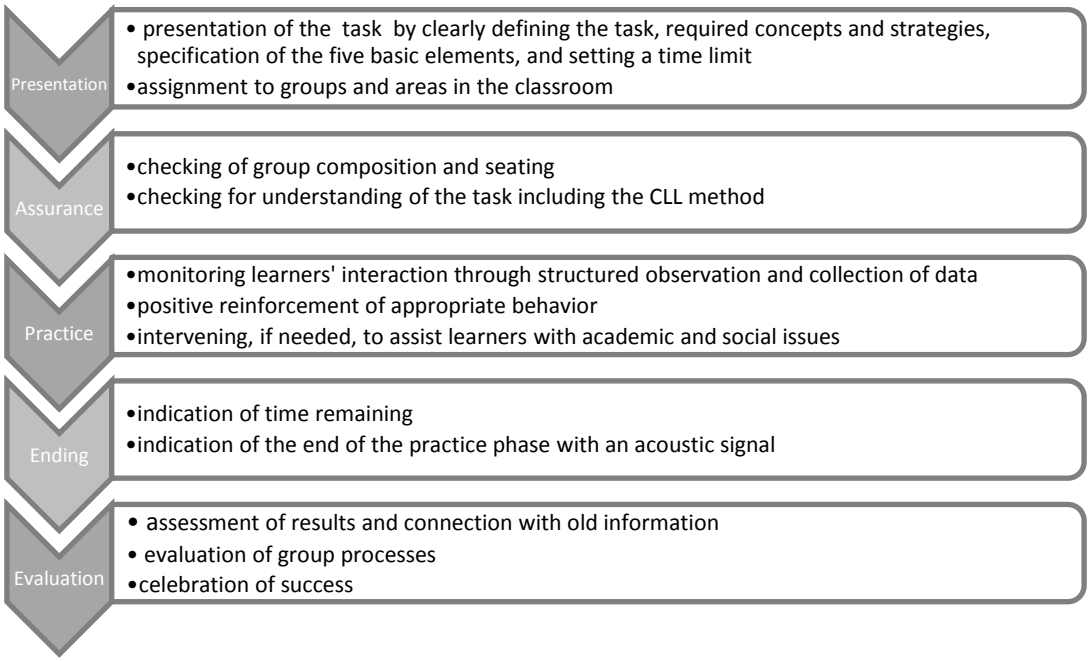

Figure 3: Structure of a CLL Lesson and Teachers' Instructional Behavior

Research conducted outside the language learning field provides evidence of the interplay of teachers' instructional behavior and learner performance in CLL.

[49] In addition to basic materials (e.g., work sheets), materials include age and language proficiency-based language support formats, discussion tickets, role cards and dictionaries (e.g., Grieser-Kindel et al., 2009 for examples).

[50] For similar research-based guidelines in group work see Haag and Streber (2012).

Five studies conducted in Australian primary and junior high schools demonstrated the benefits of explicit structuring of CLL. Based on the findings, students' levels of cooperation, group interaction, and learning can be enhanced if teachers use mixed gender and ability groups that do not exceed four members, tailor instruction to the needs of the group, and have been trained to implement CLL (Gillies, 2003)[51].

A study by Haag et al. (2000) further examined the impact of teacher actions in traditional group work on learners' behavior, interaction, and performance. The researchers analyzed data obtained in forty observed and video-taped group work sequences in ten classrooms. The results showed that certain teacher actions affected student behavior[52]. Based on their findings, the researchers identified five teacher actions that influence effective group work during the presentation, the practice, and the evaluation phase. In line with the findings, appropriate instructional behavior of language teachers in CLL involves the following:

- accuracy and clarity during the *presentation phase*
- checking for understanding during the *assurance* phase
- limited numbers of interventions with little time spent in groups, situational linkage of statements, as well as supportive behavior during the *practice phase*
- integration of new information into previously learned structures and activities that foster retention during the *evaluation phase*

With regard to *verbal behavior,* special attention has been given to language teachers' use of the mother tongue, the suitability of language in terms of learners' age and proficiency, the use of symbols, error treatment, and mediation.

The mother tongue has been recommended to be used in keeping with Butzkamm's theory of *enlighted monolingualism* (1973). The target language (i.e., English) is the working language in the CLL classroom. The mother tongue (i.e., German) is used to

[51] See also Lou et al., (1996) for a meta-analysis that proves the benefits of structured group work, including mixed gender and ability groups of up to four members, instruction based on group needs, and teacher training for CLL use.

[52] Desired student actions were theoretically generated and related with teacher actions. Three indicators of desired student actions are 1) students' level of disorientation after presentation of the task, 2) the intergroup process during the group activities, and 3) students' attention during the evaluation of the results.

support language acquisition through instructional principles such as “sandwiching” (i.e., translation of words or sentences, e.g., *girl – Mädchen – girl*). Instructional principles also involve the use of “first language tickets” that are given to each learner but are utilized on the basis of group decisions, and the assignment of an area in the classroom where learners can temporarily use the first language (Jacobs & Goh, 2007).

The suitability of language is consistent with Wulf’s recommendations on teacher talk in the foreign language classroom (2001). The length and complexity of instructions and feedback are adjusted to the age and proficiency level of the learners[53].

The ritualized use of symbols, such as an acoustic signal to indicate the end of a practice phase, is considered to be part of successful classroom management (see Jacobs & Goh, 2007; Miehe & Miehe (2004); Petersen (2001) for rituals in CLL) and to help avoid the use of the mother tongue (Schmidt, 2011).

Errors in oral language use are corrected in keeping with Timm’s considerations on error treatment in *Communicative language teaching* (1992). Errors are tolerated to a certain extent. Systematic correction takes place in instructional and practical phases. Instructional principles include sufficient time for learners to answer, opportunities to correct errors, note-taking, error evaluation with the whole class, and the assignment of the language monitor role (Grieser-Kindel et al., 2009; see also Jacobs & Goh, 2007).

Mediation in CLL is used consistent with Vygotsky’s concept of scaffolding (1978). Instructional principles include support for language learning and problem solving by more competent learners and the teacher (see Gillies, 2007; see also Johnson et al., 1998).

Related research provides evidence on the interplay of the CLL context on teachers’ verbal behavior, and of teachers’ verbal behavior on learner thinking and discourse. A study by Harel (1992) examined the verbal behavior of five Israeli ESL (English as a Second Language) teachers who had participated in a CLL and a *Communicative language teaching* course. The data included recordings of one class of frontal teaching and one of

[53] See Wysocki (2010) for grades one to four and Grieser-Kindel et al. (2009) for grades five to twelve.

CLL teaching in the ninth grade[54]. ESL teachers in frontal teaching were found to speak a great deal, lecture, ask short questions, provide extensive error correction, and constantly give instructions and commands. In contrast, ESL teachers in CLL tended to speak less, ask broader questions, frequently engage in task assistance, seldom correct errors, and provide fewer disciplinary instructions. Harel (1992) concluded that teachers' verbal behavior seemed to be more strongly affected by the organizational structure of the language classroom than by formal training of trends in language teaching.

Hertz-Lazarowitz and Shachar (1990) reported comparable findings from a study outside the language education field[55]. The findings indicated that, in addition to general differences in verbal behavior between settings, patterns of teachers' verbal behavior tended to be more individualized in CLL settings than in whole-class instruction (e.g., more specific feedback and individualized praise).

Two more recent studies extended the findings. The first study focused on the effects of a communication skills training on teachers' use of mediation or scaffolding strategies to increase learners' thinking and learning in CLL (Gillies, 2004). The findings suggested that communication skills training for teacher-learner interactions can improve teachers' verbal behavior and enhance learner thinking and learning[56]. The second study addressed differences between teachers' verbal behavior during CLL and group work (Gillies, 2006). Results indicated that teachers who used CLL engaged in more mediated learning interactions, asked more questions that fostered understanding and thinking, and made fewer disciplinary comments than teachers who used group work. Teachers' supportive behavior was found to promote learner discourse as learners tended to model their teachers[57].

[54] The participants worked at two junior high schools in Tel-Aviv. The data included recordings of one class of frontal and one of CLL teaching in the ninth grade. Teachers' communicative behavior in both settings was classified based on three categories, namely: lecture and short questions, corrections, rather than assistance during task-work, as well as instruction and discipline.

[55] The scholars investigated the verbal behavior of 27 Israeli elementary school teachers in whole-class and CLL settings.

[56] The study was conducted with two cohorts of elementary school teachers (*N*= 30) and their students (*N*= 208) in Australia.

[57] The study was conducted at four Australian high schools in Brisbane and involved 26 teachers and 303 students in grades eight to ten. Teachers' and students' discourse for a unit of work for three school terms was audiotaped, transcribed, and analyzed.

Other studies provided further evidence that teachers' verbal behavior can foster patterns of learner interaction relevant for achievement (Gillies & Khan, 2008; see also Webb, 2008). By comparing teachers' instructional actions and their impact on learner interaction in two studies[58], Webb (2008) identified forms of verbal behavior that may advance learners' help-related behavior. Based on the findings, help-related behavior can be improved by holding learners responsible for solving problems and for explaining their thinking. This requires teachers to ask learners to justify, clarify, and reflect on their ideas through specific questions that elicit thinking, to have learners create problem-solving strategies, and to listen to them without evaluating their strategies[59].

In summary, the section above indicated how appropriate instructional and verbal behavior can positively affect CLL effectiveness.

With regard to the impact of *cognitions* on effective CLL use, the interplay of at least four factors have been stressed: *language teachers' knowledge about CLL and its use*, their *attitudes toward CLL and its use*, their *beliefs about CLL and education*, and their *perceptions about individual CLL use and support of CLL use*.

In connection with *knowledge about CLL and its use,* teachers' conceptions of CLL, their use of instructional principles, their experiences and the impact of training programs have been considered. Johnson and Johnson (1999) affirmed in this context that teachers' successful and ongoing use of CLL is affected by their understanding of the concept and skillful use of related instructional principles. Numerous findings have verified this statement (e.g., Gillies & Boyle, 2010).

[58] Both studies were conducted in mathematics. The first study examined learner interaction and achievement, and teachers' instructional actions in four seventh-grade classrooms. The results are presented in Webb and Mastergeorge (2003) and Webb, Ing, Nemer, and Kersting (2006). The second study looked at learner discourse and learning and teacher discourse in three second and third-grade classrooms. Teachers in the second study had been trained to stimulate thinking processes, to ask questions that foster learners' thought processes, as well as to structure whole-class and CLL settings providing opportunities for learner-learner and learner-teacher conversations about thought processes and sharing of answers, ideas, and strategies. The results of the second study are described in Webb and Ing (2006).

[59] A related study conducted in the Netherlands indicates that learners' help-related behavior and achievement are largely affected by teachers' verbal behavior, but also, learners' ethnic background (Oortwijn, Boekaerts, Vedder, & Strijbos, 2008). Immigrants tended to use less help-related behavior than local ones. The researchers conclude that this might be due to linguistic proficiency levels. Nevertheless, in an earlier study immigrants were found to use a set of cognitive strategies more often and to make more significant contributions in CLL (i.e., Group Investigation] than in direct whole-class instruction (Sharan & Shachar, 1988).

Koutselini (2008/2009) examined secondary school teachers' CLL understanding (*N* = 94) in Cyprus. The results showed that teachers are likely to classify CLL as a form of group work. They are often not aware of the theoretical and practical differences of the two concepts. Similar misconceptions have been found among teachers who claimed to use CLL regularly. These North American teachers had attended CLL training programs or worked at schools that declared its regular use (Antil, Jenkins, Wayne, & Vadsay, 1998)[60]. Survey and interview findings demonstrated that the majority of teachers reported using CLL but only a few used research-based forms. Instead, informal forms which lacked essential instructional principles were implemented. The findings are consistent with those by Veenman, Kenter, and Post (2000), Hiatt and Sandeen (1990), and Siegel (2005). The studies indicated that teachers rarely set group goals that involved individual accountability and positive interdependence. Also, social skills were seldom taught and evaluated.

A recent qualitative Australian study also verified these findings (Hennessey & Dionigi, 2013). Half of the twelve primary school teachers who participated in semi-structured interviews were categorized to have a limited understanding of CLL. Four showed general and two detailed understanding[61]. Likewise, the research findings indicated that teachers' knowledge about CLL seems to affect their perceptions of factors influencing its use. Participants with a limited or general understanding reported issues concerning learners' age, discipline, on-task behavior, and learner autonomy. Teachers with a detailed understanding identified ways to handle these issues by applying CLL principles (e.g., role assignment).

Along similar lines, Gillies and Boyle (2010) examined teachers' perceptions of CLL use in terms of overall experiences and difficulties, as well as their impact on ongoing CLL use[62].

[60] The study examined the frequency, conception, and form of CLL used by elementary teachers (*N* = 85) in the United States.

[61] Limited understanding was defined as minimal knowledge of essential CLL principles introduced by Johnson and Johnson (1999) and others. General understanding included knowledge of some CLL features, functions and terms. Detailed understanding involved knowledge of all or most CLL principles and CLL pattern language.

[62] The participants (*N* = 10) were volunteers who worked at five schools in Australia (i.e., Brisbane) and taught middle grade students (grade six to nine). Prior to the semi-structured interviews, all of them had participated in a two-day CLL workshop which specifically covered the application of the five basic elements, the construction of complex tasks, and ways for student assessment.

The results indicated overall positive experiences. However, teachers reported difficulties with regard to five aspects:

- *implementation*: i.e., off-task behavior, time management, learner readiness for CLL
- *group composition*: i.e., assignment to small heterogeneous groups
- *task design*: i.e., construction of motivating, open-ended, enquiry-based tasks that involved learners' choice
- *learner preparation*: i.e., teaching of social and conflict resolution skills
- *assessment of performance*: i.e., assessment of student learning based on formative and summative evaluation

Teachers' perceived difficulties in CLL use are consistent with shortfalls observed in teacher actions during group work (see Chap. 3.1) as identified in a study by Haag et al. (2000)[63].

The above findings indicate the need for CLL teacher training programs that give emphasis to knowledge and skills for successful and sustained use. A Dutch study showed the benefits of such a program. Krol, Veenman, and Voeten (2002) investigated the effectiveness of a CLL teacher training program for elementary school teachers. The program aimed at teachers' mastery of the integrated use of CLL (including the *Learning Together* method and the *Structural Approach*) and direct instruction (e.g., review, presentation, guided practice)[64]. Training effects were found for structuring positive interdependence and individual accountability, teaching social skills, and evaluation of group processes between the experimental (n = 32) and the control group (n = 33) on the

[63] In 50% of the sequences teachers did not check for student understanding of the task. Besides, only two teachers spent less than 10% with the groups to control and guide the group processes (70% of all teacher interventions), or to explain the task and the procedure again. This often disturbed intergroup communications. Also, interventions were often not related to the group processes. Teachers frequently "jumped" into the groups to get their ideas accepted. With regard to the evaluation of the group results, research findings indicated the largest variance (SD = 1.94) between teachers. Corresponding to the task, several teachers were found to ask the groups to present their results one after another.

[64] The participants received 18 hours of training on six half-day sessions throughout a school year. In addition, they were asked to implement the training content in their classrooms. Teachers' classroom experiences were discussed during the training sessions. A pre-post control group design was used to investigate teachers' instructional actions with regard to the implementation of the five basic elements and practices of direct instruction. Each teacher was observed for 30-minutes prior to the training and again afterwards.

posttest. Positive effects were also found for the integrated use of CLL and direct forms of instruction, and the activation of prior knowledge of social skills.

A more recent Japanese study also indicated positive training effects. Nishinaka and Sekita (2010) compared the quantity and quality of CLL use[65] of a cooperative learning school (i.e., seven years of CLL use) and regular schools. The data from sixteen junior high school teachers from the cooperative school were compared to the 643 teachers from regular junior high schools[66]. Teachers from the CLL school reported using CLL more often (42% of total classroom time over the year at the CLL school, 32% at regular schools). Besides, the results showed that teachers who had been trained for CLL consciously implemented the five basic elements, in particular positive interdependence, individual accountability, social skills, and group processing.

In summary, the section above identified a theory-based CLL conception and related instructional principles as essentials for effective CLL use.

Concerning *attitudes toward CLL and its use*, teachers' perceptions of advantages and disadvantages, expectations that impede CLL use, and the effects of training programs on related factors have been studied. Research has indicated a positive trend in German teachers' attitudes toward CLL use from 1984 to 1999 (Rotering-Steinberg, 2000; Rotering-Steinberg and Kügelgen, 1986; see also Ganser, 2005)[67].

Rotering-Steinberg (2000) examined teachers' attitudes toward CLL by using a checklist that included eleven advantages and twelve disadvantages, as well as a list of negative expectations that can impede CLL use in particular classes. German elementary, middle, secondary, and vocational school teachers were surveyed in 1984 (*N* = 224) and 1999 (*N* = 323). The results indicated an increase in positive and a decrease in negative attitudes. Key factors against CLL use were class size and preparation time.

Ganser (2005) made similar findings among a group of Bavarian teachers (*N* = 720). Perceived disadvantages reported by teachers included: unsuitable seating within

[65] The Japanese teachers had been trained for the use of the *Learning Together* method.

[66] The data of the 643 teachers from regular junior high schools was gathered in an earlier nationwide study on CLL use by Takahata, Harada, and Sekita (2010).

[67] See also German studies on teachers' use of pair work and group work (e.g., Bohl, 2000; Hage, Bischoff, Dichanz, Eubel, Oehlschläger, and Schwittmann, 1985; Kanders, 2000) and international findings (e.g., Bassett, McWhriter, & Kitzmiller, 1999; Veenman, Kenter, & Post, 2000; Stern & Huber, 1997).

classrooms, high noise level, classes too big, social loafing of some students, lack of materials for CLL, and curriculum pressure. Perceived advantages were: an increase in student autonomy and social climate, growth of student creativity, teacher support in class, higher student-centeredness, work on problem-solving strategies, and information collection by students. The disadvantages were considered true for group work but not pair work. Pair work was perceived to have the same advantages as group work and project work. Expected objectives of pair work, group work, and project work included the acquisition of social skills rather than the acquisition of knowledge which was expected from direct instruction.

Other studies examined changes of teachers' perceptions and attitudes toward CLL based on distinct training procedures applied in CLL teacher training programs. Koutselini (2008/2009) assessed secondary teachers' perceptions of CLL use and learning outcomes with a checklist similar to the checklist applied by Rotering-Steinberg (2000). The findings indicated that teachers' attitudes toward CLL can be positively modified through experiential learning (see Chap. 4.1) in teacher training programs.

In summary, the findings specify the impact of teachers' *attitudes toward CLL and its use* on effective use and how attitudes can be changed through distinct training programs.

With regard to *beliefs*[68] *about CLL and education* the impact of implicit theories and related teaching routines and practices on teachers' CLL use have been studied. Brody (1998) stated that teachers tend to adapt CLL practices to their personal teaching routines and practices when first using the concept. Depending on the consistency of beliefs about CLL and education, as well as the innate belief orientation of a particular CLL method, teachers are more or less forced to adjust their instructional behavior, and in turn their implicit theories (Brody, 1998).

Brody (1993) found North American teachers modified their implicit theories after formal training, reflection, and analyses of three CLL methods with different belief orientations (i.e., *Learning Together*, *Structural Approach* and *Student Teams-Achievement Divisions* method*).* Based on teachers' belief orientations, the following three groups were

[68] Teachers' beliefs or implicit theories, based on the specific situation and personal goals, justify and guide teacher's thoughts and actions (Dann, 2000).

identified: transmission-oriented, transaction-oriented, and transformation-oriented teachers[69]. Transmission-oriented teachers viewed CLL as a technique for the transmission and mastery of predetermined knowledge and skills. In this, the teachers have a directive role (i.e., fixing the content, structuring the learning environment, and directing student learning). Transaction-oriented teachers regarded CLL as a procedure to foster learners' intelligence in general, and problem-solving, higher-order thinking, and social skills. The teacher is hereby a facilitator or learner-centered authority who offers appropriate resources and learning environments. Transformation-oriented teachers considered CLL as a philosophy which aims at the integration of physical, cognitive, and affective dimensions. The teachers' role is to create a community of learners who have control over their own learning and who are involved in dialogues and inquiry. Participants changed their implicit theories from transmission-oriented to transaction-oriented beliefs about CLL and education during the study. They had more complex, elaborated, and organized cognitive schema of CLL themes that guided their actions. Also, novice teachers with little CLL experience (i.e., one or two years of use) commonly reported issues of control and their role as an authority in CLL. In contrast, more experienced teachers (i.e., more than two years of use) frequently mentioned dilemmas concerning the nature of knowledge and knowing (e.g., balancing curriculum demands and student or group needs).

Other researchers, who examined the impact of beliefs on teacher actions in group work, reported similar research findings (Dann, Diegritz, & Rosenbusch, 2002). Control issues were found to create most cognitive-emotional conflicts (Haag, v. Hanffstengel, & Dann, 2001). In situations that required clear decisions for either structuring interaction or fostering autonomy, teachers consciously or unconsciously used different, more or less effective actions due to their beliefs or implicit theories about group work[70].

[69] The classification has been made with regard to teachers' CLL conception: beliefs about CLL and pedagogy, locus of control and authority, the teacher's role, conceptions of decision-making, and the nature of knowledge and knowing.

[70] Novices or less successful teachers tended to hold transmission-oriented beliefs. They constantly experienced insecurity or cognitive-emotional conflicts about 'intervention or no intervention'. Also, actions were limited to 'intervention or no intervention'. Experts or more successful teachers were found to hold transaction-oriented or transformation-oriented beliefs. They had more perceptional categories and were able to use instructional actions situation-specific and goal-oriented. Their cognitive representations were richer, more complex, and better organized than those of novices (Haag & Dann, 2001).

In summary, the section above has indicated not only how teachers' beliefs about CLL and education affect their actions, and in turn CLL effectiveness, but also how beliefs and actions can be modified through certain training programs.

Concerning *perceptions about individual CLL use and support of CLL use,* research has focused on teachers' perceived abilities to foster student learning and to use CLL successfully, teachers' perceptions of what others think about CLL use, and of personal and technical support for effective CLL use. In line with Bandura's theorizing (1997), the concept of *self-efficacy* has been viewed as a key factor. Teacher efficacy includes *personal and general teaching efficacy*[71]. Both types have been addressed by CLL research. The findings indicated that high CLL use can foster teachers' sense of personal teaching efficacy (Shachar & Shmuelevitz, 1997; Wax & Dutton, 1991) and vice versa, teachers with a high level of personal teaching efficacy tended to use CLL more often (Ghaith, 2004; Ghaith & Yaghi, 1997).

Based on the assumption that teachers' CLL expertise promotes their sense of personal teaching efficacy, several studies have assessed effects of training programs. Wax and Dutton (1991) found elementary teachers (*N* = 129) in a school district in the United States (i.e., Oregon), who participated in a CLL training program, used it to varying degrees, which in turn affected their sense of personal teaching efficacy. In contrast to low (zero to three lessons per week) and medium users (four to six lessons per week), teachers with the highest level of weekly use (seven or more lessons a week) perceived the highest degree of personal teaching efficacy, sense of power in the teaching role, confidence in working with students, and willingness to innovate.

Shachar and Shmuelevitz (1997) evaluated the effects of a program on teachers' sense of personal and general efficacy in Israel and categorized their CLL use on three levels (*N* = 121). The findings indicated that a more frequent use of CLL leads to a higher level of personal teaching efficacy regarding the learning of slow students. Also, collaboration with colleagues was found to increase teachers' sense of general teaching efficacy and their efficacy in promoting learner' social relations.

[71] P*ersonal teaching efficacy* deals with teachers' self-expectations to be able to foster student learning. *General teaching efficacy* refers to outcome expectations that are seen to be limited by external factors beyond teachers' abilities (Bandura, 1997).

Whereas the studies above considered a higher sense of teaching efficacy as a consequence of CLL use, other studies viewed it as a reason for its use. In a study by Ghaith and Yaghi (1997), teachers with a high sense of personal teaching efficacy were more likely to use CLL. Experience was also found to negatively impact on teachers' sense of general teaching efficacy. More experienced teachers tended to feel that their teaching was limited by external factors.

A study by Ross (1994) indicated that descriptions of successful CLL use and encouragement by other teachers can promote general teaching efficacy. Consistent with Bandura's concepts (1997) of *vicarious experiences* and *persuasion*, positive effects of expert teachers' descriptions of successful CLL use and encouragement of use on novices' sense of general teaching efficacy were found.

Another study examined the impact of teachers' sense of personal and general teaching efficacy on their use of the *Student-Team-Achievement-Divisions (STAD)* method in the EFL classroom (Ghaith, 2004)[72]. Teachers' intentions to use *STAD* and their actual use of the method were investigated by drawing on Ajzen's (1985) *Theory of Planned Behavior* (*TpB*). The *TpB* holds that intention predicts behavior. Intentions are influenced by the following:

1) beliefs about its expected outcomes and the evaluations of these outcomes, that is, *behavioral beliefs*; *behavioral beliefs* lead to *favorable* or *unfavorable attitudes toward the behavior*
2) beliefs about normative expectations of important others and motivation to fulfill these expectations, that is, *normative beliefs*; *normative beliefs* result in social pressure or *subjective norm*
3) beliefs about internal and external factors that may support or impede the behavior and perceived control over these factors, that is, *control beliefs*; *control beliefs* lead to *perceived behavioral control* (Ajzen, 1985)

[72] The sample was 55 Lebanese EFL teachers who worked at five different schools and were trained to use *STAD* in the EFL classroom.

Ajzen (1991, 2002) later stated that *actual behavioral control*, defined as control beliefs in a situation that allows performance of the behavior, affects a person's perceived behavioral control and the actual behavior (see Fig. 4).

Drawing on the *TpB*, Ghaith (2004) examined relations of EFL teachers' *STAD*[73] use and their attitudes toward *STAD* use in the EFL classroom, perceptions of subjective norms, and the degree of perceived behavioral control, including personal and general teaching efficacy. In addition, differences in teachers' use of *STAD* were determined based on affecting variables. EFL teachers' intentions to use STAD in the EFL classroom, their motivation to comply with normative expectations, and the degree of actual behavioral control were not assessed. The findings indicated significant effects on EFL teachers' attitudes toward *STAD* use in the EFL classroom, their perceptions of subjective norms, and on their sense of personal and general teaching efficacy.

Figure 4 illustrates *STAD* use based on the *Theory of Planned Behavior.*

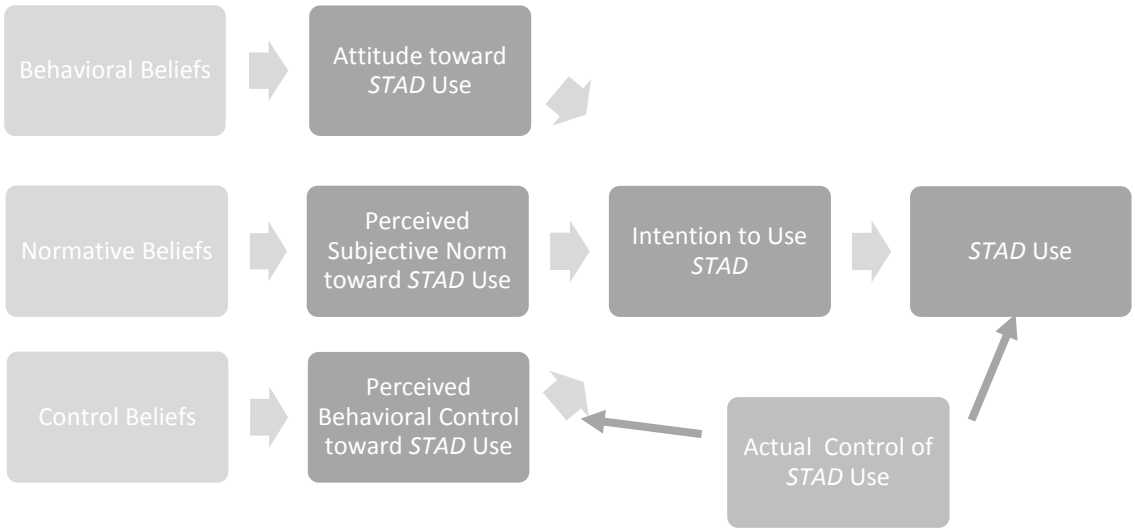

Figure 4: *STAD* use on the Theory of Planned Behavior

In summary, the section above has shown how teachers' sense of personal and general teaching efficacy as well as their beliefs of others' expectations can influence CLL use.

Findings of other studies have shown that teachers' CLL use is affected by the school environment and organization, and especially by *personal and technical support.*

[73] See Slavin (1994) for a description of the *Student Teams-Achievement Divisions (STAD)* method.

Regarding *personal support*, positive effects of teacher collaboration and encouragement from colleagues, administrators and students have been identified (e.g., Fullan, Bennett, & Rolheiser-Bennett, 1990; Ishler, 1993; Ishler, Johnson and Johnson, 1998)[74]. Ishler (1993) conducted a study in the United States (i.e., North Carolina) that assessed the level of CLL use and factors that govern its long-term use. 158 educators from diverse schooling backgrounds were surveyed three years after participating in a one year state-wide CLL staff development program by Johnson and Johnson (Johnson & Johnson, 1998)[75]. The findings suggested that CLL long-term use strongly depends on the membership and involvement in a collegial teaching team, personal encouragement for CLL use by colleagues, administrators and students, as well as personal commitment to CLL. Positive evaluations of the training program and technical support have been found to impact slightly on teachers' long-term use of CLL (Ishler et al., 1998).

With reference to *technical support*, the impact of various factors including professional advice, materials, time, and money have been investigated (Bassett et al., 1999; Jürgen-Lohmann, Borsch, & Giesen, 2002; Krol et al., 2002; Schnebel, 2003). Some studies have identified positive effects of advice provided in training programs. The influence of program length, teachers' willingness to participate, training components, and organizational changes of schools have been examined. Bassett et al. (1999) investigated the impact of program length and willingness to participate. The study examined the degree of CLL use of 115 grade seven and eight middle school teachers (i.e., 16 schools in two school districts in North America), who had been trained for CLL. The majority of teachers used CLL on a regular basis. 18 of the 115 teachers were typified as low users, 50 as moderate, and 47 as high users[76]. Significant differences between high and low users were apparent in the number of hours of training, the reasons for participation, and the

[74] The impact of collegial collaboration on the sustained implementation of instructional innovations is supported by research inside and outside the CLL field. In general, schools with established collaborative structures have been found to work on the implementation of training contents after the formal program ended (e.g., Gräsel, Parchmann, Puhl, Baer, Fey, & Demuth, 2004). Also, schools with intense collaboration, a positive school climate, favorable contextual conditions, and personal and teaching related cooperation among teachers, are more likely to adopt instructional innovations (Gräsel, Stark, Sparka, & Hermann, 2007).

[75] The CLL teacher training involved formal training in CLL and the implementation of CLL into the school structure via formation and maintenance of collegial teaching teams and weekly team meetings.

[76] Five teachers were found to almost never use it, 13 to never or sometimes use it, 50 to sometimes use it, 33 to sometimes or almost always use it, and 14 to almost always use it.

support from students and parents. High users had experienced extensive and professional training, were willing to participate, and received strong support from students and parents. Low users usually had less training experience, had been asked by their principal to take the training, or had to take it at college, or needed extra credits, and received little support from students and parents (Basset et al., 1999).

A pilot study by Schnebel (2003) examined potentially effective features of a four-month CLL staff development program in Germany[77]. Based on her findings, she identified four potentially beneficial training features:

- the combination of formal CLL instruction during training sessions, informal use of CLL in the classroom, and discussion of experiences in the training sessions
- the "educational biplane principle" which involves experiences with CLL as learners and reflection of theoretical and methodological implications of the experiences
- the creation of lesson planning pairs, in particular teachers with the same subject and grade level
- the selection of CLL methods and techniques presented, based on the class level and subjects of participants (p. 319; see also Chap. 4)[78]

Little research on organizational changes for CLL use has been conducted. Related training programs are usually considered as part of school development. In general, these programs attempt to develop a cooperative school culture, including openness and positive attitudes toward CLL and team-based structures in the entire school (e.g., Krol, et al., 2002)[79]. Up till now, organizational changes in most programs are limited to school administrators' support via changes of training participants' schedules to provide time for collegial observations (e.g., Schnebel, 2003). Jürgen-Lohmann et al. (2002) acknowledged positive effects of flexible organizational structures. The researchers examined the

[77] Dependent variables of the study included: changes in teachers' instructional behavior, student and teacher experiences with CLL, the quality of CLL use, evaluation and training components, and teachers' beliefs about education. Students and teachers were surveyed. Additional data on teachers' instructional behavior and student interaction were gathered through observations.

[78] See also an evaluative report of CLL training and follow-up support in two North American school districts by Roy, Laurie, and Browne (1985).

[79] See Johnson and Johnson (1994b) for organizational structures of a CLL school.

effectiveness of CLL in different school environments. In addition to openness and positive attitudes toward CLL, flexible organizational structures, including flexible time frames and classroom arrangements, and a positive class climate were found to affect CLL effectiveness in terms of student learning[80].

In summary, the section above has indicated how teachers' perceptions of personal and technical support influence effective CLL use.

3.3 The Language Learner

The impact of language learner diversity on effective CLL use, and in turn, CLL effectiveness has been considered to different extents. A number of language learner characteristics have been emphasized. At least three characteristics that affect teachers' effective CLL use can be distinguished: *goal preferences*, *socio-cultural preparedness*, and *verbal behavior*.

Learners' *goal preferences*[81] can influence effective CLL use but may be changed by effective CLL use. Consistent with Johnson and Johnson's theorizing on goal structures (Johnson & Johnson, 2005; see Chap. 2.1), Neber (1994) studied learners' cooperative and competitive learning preferences and their impact on behavior[82]. Learners' preferences were found to correlate with their use of communication as a learning strategy. The higher the cooperative learning preference, the more communication was used. Likewise, cooperatively oriented instruction was found to reduce competitive learning preferences.

Hijzen, Boekerts, and Vedder (2006) examined the effects of learners' goal preferences (i.e., social support, belongingness, mastery, and superiority goals) and perceptions of contextual factors, including teachers' instructional behavior and the social climate in the classroom on the perceived quality of CLL[83]. Learners' social support goals had the

[80] See Hameyer and Heggen (2007), Sharan and Shachar (1994), and von der Groeben (2008) for theoretical and practical perspectives of CLL implementation as part of school development.

[81] Another concept often emphasized in this context is learners' ambiguity tolerance. Research findings indicate that CLL settings rather favor uncertainty-oriented learners, and disadvantage certainty-oriented learners who prefer highly-structured, individualized and competitive learning situations (Huber, Sorrentino, Davidson, Eppler, & Roth, 1992; Huber & Roth, 1999).

[82] The study was conducted with two samples (n_1=52, apprentices at a vocational school; n_2=237 gifted secondary school students).

[83] A sample of 1.920 first grade students attending eleven secondary vocational schools in the Netherlands participated in the study.

strongest correlation with the perceived quality of CLL. In addition, CLL quality was determined by a combination of social support goals, the extent to which social skills were taught, teachers' monitoring behavior, and perceptions of academic and emotional peer support.

In sum, learners' goal preferences can affect effective CLL use, but can be positively modified by language teachers' effective CLL use.

Learners' social cultural preparedness is considered to impact on effective CLL use at the group as well as the individual level[84]. At the group level, socio-culturally determined interpersonal relationships may at first have negative effects on the class climate. However, research findings have suggested that CLL creates positive interpersonal relationships. Learners have been found to be more supportive, to have better conflict resolution skills, and show more pro-social behavior (Educational Resource Information Center, 1999; Johnson & Johnson, 1989). Research has also shown that CLL fosters positive attitudes toward learners of other ethnical backgrounds, popularity of learners between ethnical groups, as well as intergroup relations (Avci-Werning, 2004 a, and b) and cross-racial friendships (Slavin, 1977, 1979; see also Slavin, 1995).

At the individual level, experience with CLL and learners' cultural backgrounds may cause anxiety and hence impede effective use. In general, CLL has been considered to (Campbell & Ortiz, 1991; Crandall, 1999) and found to (Suwantarathip & Wichadee, 2010; see also Theinert, 2013) reduce foreign language anxiety. Duxbury and Tsai (2010) reported the controversial findings of a comparative study that involved three universities in South Taiwan and one university in the United States (N = 385). They investigated learners' level of foreign language anxiety, as well as relations between foreign language anxiety and learners' attitudes toward CLL and perceptions of CLL use. Correlations between foreign language anxiety and perceptions of CLL use were found at one Taiwanese college[85]. At this college EFL was taught by a Taiwanese, not a native North American professor. Based on their findings, the researchers concluded that the lack of anxiety among US-American learners might result from the fact that CLL is already common practice. In this regard,

[84] See also Cohen (1994b), Johnson et al., (1998), Konrad and Traub (2008), and Weidner (2006), as well as Chap. 3.1 for learner preparation for CLL in terms of essential skills.
[85] No correlations were found for foreign language anxiety and learner's attitudes toward CLL.

Sharan (2010) noted that traditions of learners' cultures may not always be compatible with CLL, and therefore may have harmful effects on their comfort level in CLL. Duxbury and Tsai (2010) further assumed that the Taiwanese professor did not use CLL appropriately as a result of his cultural background.

In summary, this section has elucidated how learners' socio-cultural preparedness for CLL may have an effect on its effective use.

Regarding language learners' *verbal behavior* in CLL, the amount and diversity of language output as well as the use of informal and non-verbal linguistic strategies have been emphasized. Based on the hypotheses that CLL provides more opportunities to produce more diverse and complex output, and to receive more comprehensible input than direct whole-class instruction, Deen (1991) conducted an exploratory study in a university class where students were beginning Dutch as a second language[86]. Communication and interaction patterns of 16 native English speakers in two lessons, using the *Jigsaw* method[87] and direct whole-class instruction, were videotaped[88]. The findings indicated that learners in the CLL setting were more actively involved and produced more language output (including Dutch, English, and mixed language)[89]. Deen (1991) affirmed that due to the increased amount of speaking time in the CLL, learners took more turns and asked more questions. They also modified their language to make it more comprehensible, used more diverse vocabulary, repeated words more often, and made fewer grammatical errors. Errors were less frequently corrected by the teacher (i.e., 30% in comparison to 60% in direct instruction). Typically, other learners or the learners themselves did the correcting. On the other hand, the results showed that weaker learners in the CLL setting took fewer turns and did not produce as much output as stronger learners. In addition, no

[86] The results of this study are limited by methodological restrictions and thus cannot be generalized.

[87] See Aronson, Blaney, Stephan, Sikes, and Snapp (1978) for a description of the *Jigsaw* method.

[88] Data analysis focused on the quantity (i.e., turn-taking, questions, Dutch teaching units) and quality of talk (i.e., lexical variety, complexity, error rate, correction).

[89] A recent German study by Theinert (2013) with (N = 300) eighth-grade EFL learners supports Deen's (1992) findings. Using reciprocal teaching and learning ("WELL method") as a special form of CLL, significant effects were found on EFL learners' spontaneity, use of strategies, listening comprehension, fluency and the communicative value of utterances.

significant differences for the complexity of language output were found between the CLL and the teacher-centered setting[90].

Gumperaz, Cook-Gumperaz, and Szymanski (1999) took a similar research approach (i.e., ethnographic field study). The study investigated learners' use of informal linguistic strategies in CLL. The data include 200 hours of 90-minute audiovisual recordings collected in third and fourth-grade bilingual classes in North America (i.e., California) over a period of three years[91]. Gumperaz et al. (1999) found out that learners in CLL groups rely on communicative practices that differ greatly from adult talk. Monolingual and bilingual learners were found to utilize similar verbal strategies. Monolinguals used style switching (i.e., informal and formal talk) and voicing (i.e., intonation, stress, and volume). Bilinguals employed the same strategies as well as code switching (i.e., use of Spanish and English). Although utterances were incomplete and ungrammatical, learners were found to work on academic language tasks and to solve language problems that arose while working on the assignments. The researchers summarized their findings in three strategies:

1) shifts in communicative style from informal peer group conversational forms to more formal, lexically, and grammatically appropriate styles to negotiate solutions to a task
2) shifts in intonation to pass on information that adults would transmit through lexical items
3) shifts in linguistic codes by bilingual learners for the same purposes

[90] Similar observations on student behavior and discourse were made outside the language learning field. Students were found to engage in multi-directional interactions as they provided helping behaviors in response to explicit and implicit requests, and adjusted their explanations to others' level of competence to foster understanding (Gillies & Ashman, 1998). In addition to more frequent utterances and the use of more words per turn, students in CLL groups also engaged more frequently in higher academic (Shachar & Sharan, 1994) and task-related interactions (Gillies & Ashman, 1998). Moreover, a recent study by Gillies (2008) indicated that structured CLL groups were more effective in promoting helpful student discourse and behaviors than unstructured.

[91] The CLL method used was the *Cooperative Integrated Reading and Composition* method, which had been adapted to the needs of bilingual students. The researchers took an interactional sociolinguistic perspective on discourse analysis to examine both monolingual and bilingual communication by using one framework. Selected excerpts were analyzed with regard to learners' linguistic use of style and code switching to convey information and negotiate solutions.

The findings of another quasi-experimental study with a pre-posttest group design (*N* = 70) by Liang (2002) indicated positive effects of CLL on EFL learners' ability to deal with communication breakdown and gains on their non-verbal competence. The researcher compared the use of CLL methods (i.e., *Three-Step-Interview*, *Learning Together*, *Inside-Outside-Circle*, *STAD*) and the *Grammar translation* and the *Audio-Lingual-Approach* in two groups of Taiwanese first year junior high school EFL learners for one semester. The treatment group tended to use more verbal (i.e., reminding the partner what to say or saying, "I'm sorry.") and non-verbal strategies (i.e., smiling) than the comparison group to deal with peers' or their own silence[92]. The comparison group learners were more likely to end the conversation. The treatment group learners also outperformed the control group with regard to non-verbal strategies including eye contact, smile, as well as appropriate conversational distance.

In conclusion, language learners' verbal behavior in CLL has been found to differ from verbal behavior in direct whole-class instruction in terms of output and use of informal and non-verbal strategies.

[92] Data was collected from oral tasks, monthly examinations, questionnaires, as well as student and teacher interviews.

4 Design of an Advanced In-service CLL Teacher Training

The previous chapter gave a research-based overview of variables that may affect language teachers' effective CLL use. This chapter presents the design of CLL teacher training programs.

Many pre-service (e.g., Cohen, Brody, & Sapon-Shevin, 2004) and in-service CLL teacher training programs (e.g., Brody & Davidson, 1998a; Green & Green, 2005) have been suggested. These programs are usually action-oriented and referred to as *trainings* (Brody & Davidson, 1998a). In educational psychology the term *training* has been used to describe programs that aim at development, improvement, or maintenance of certain competencies and/or intentions via goal-oriented and continuous practice (Rheinberg, Bromme, Minsel, Winteler, & Weidenmann, 2006). Teacher trainings are a subcategory. Jürgens (1983) defined them as specific arrangements in which pre-service or in-service teachers extend, modify, or acquire behavior via systematic guided practice and experience in protected settings. She further stated that training contents are often extended by theoretical explanations of the origin and impact of behavior and its role in classroom interaction. Furthermore, training processes are more or less explicitly based on a theoretical concept that explains changes of teachers' behavior.

CLL teacher trainings draw on these premises to varying extents. Some have similar features, but differ regarding either training objectives and contents, or processes. Training objectives and contents are usually based upon the underlying CLL concept and related instructional principles (Johnson et al., 1999). Research findings on variables that have been found to impact on effective CLL use are often considered as well.

Johnson et al. (1999) distinguished technique-oriented/prescriptive and procedure-oriented/conceptual trainings (see Chap. 2). In technique-oriented trainings, teachers learn to use a variety of CLL techniques. In procedure-oriented ones, teachers learn to adjust a conceptual framework to contextual conditions. Technique-oriented trainings, such as those linked with the *Structural approach,* aim at predetermined skills, that is, the appropriate selection and use of CLL techniques (Kagan & Kagan, 1998). Procedure-oriented ones, such as those linked with the *Learning together* method, focus on the various competencies and personality traits needed for effective use of conceptual

frameworks (Johnson & Johnson, 1998)[93]. Some recent CLL trainings are technique-oriented and procedure-oriented (e.g., Krol et al. 2002). Others are designed for a specific group of teachers with respect to the level of teacher education, school type, grade level or subject area (e.g., Farivar and Webb, 1998).

4.1 Design of Established CLL In-service Teacher Trainings

Training objectives, contents, and processes of recognized CLL in-service teacher trainings differ based on their orientation, that is, the view of CLL as a technique or a procedure. This section provides an integrative overview of the design of recognized technique-oriented and procedure-oriented in-service teacher trainings in terms of training objectives, contents and processes.

Training objectives aim at the development, improvement, or maintenance of competencies and personality traits which are considered to determine effective CLL use. Effective use is usually defined with regard to the frequency and quality of CLL use.

Training contents sometimes include theoretical foundations (Chap. 2) and related research findings indicating CLL effectiveness (e.g., Johnson & Johnson, 1998). Often, some of the variables that have been found to impact on language teachers' effective CLL use are addressed (see Chap. 3). With regard to the *context*, learning conditions and related research findings (e.g., Johnson & Johnson, 1998), as well as task design (e.g., Kagan & Kagan, 1998) may be discussed. *Teacher variables* may be covered in terms of instructional (e.g., Krol et al., 2002) and verbal behavior (e.g., Gillies, 2004), and cognitions. Teacher cognitions may include CLL conceptions (e.g., Johnson & Johnson, 1998), attitudes toward CLL and its use (e.g., Koutselini, 2008/2009), beliefs about CLL and education (e.g., Brody, 1998), perceptions of what others think about CLL and its use (e.g., Ghaith, 2004), and personal and technical support (e.g., Ishler et al., 1998). Perceived abilities to use CLL effectively are seldom directly addressed (e.g., Ross, 1994). With reference to the *learner*, goal preferences (e.g., Johnson & Johnson, 1998), preparedness, and verbal behavior (e.g., Webb, 2008) may be given emphasis. Up till now, socio-cultural preparedness (Sharan, 2010) is often not highlighted. Furthermore, students' verbal behavior does often not involve the use of a foreign language.

[93] See Havers and Toepell (2002) for different goals of teacher trainings.

Training contents and *processes* are usually combined to accomplish particular objectives. Likewise, *training processes* are linked with one or more theoretical concept/s that explain/s the acquisition of skills and competencies, and changes of personality traits. Five theoretical concepts can be distinguished: *experiential learning*, *vicarious learning, behavior modification,* cognitive *behavior modification*, and *personal and technical support*.

The most common concept is *experiential learning*[94]. It draws on the *Theory of Experiential Learning* (Kolb & Frey, 1975). Related activities are aimed at the development of teachers' procedural knowledge of effective CLL use (Johnson & Johnson, 1998) and favorable attitudes toward CLL (Koutselini, 2008/2009). Experiential learning involves four stages: experience, reflection, conceptualization, and transfer (Sharan & Sharan, 1987). At the first stage, training participants experience CLL as if they were learners in the classroom. The trainer provides CLL settings and models teachers' instructional and verbal behavior. CLL theory and the settings are the content of the activities. Settings can range from CLL techniques to conceptual frameworks representing the differences between group work and CLL (Cohen, Brody & Sapon-Shevion, 2004)[95]. During the second stage participants reflect not only upon their experiences by sharing observations and reactions, but also upon the personal and professional significance of the experience. The trainer structures the reflection process by asking questions addressing the experience and its personal and professional meaning. Participants' feelings are sometimes discussed as well. The third stage aims at the conceptualization of CLL theory. Based on their reflections, participants organize their experiences into concepts. The trainer provides relevant theoretical and practical implications as well as related research findings to ensure teachers' theory-based and research-based conceptualization. New terms and concepts are introduced, and readings may be assigned. During the fourth stage, participants suggest or plan the transfer of CLL techniques or conceptual frameworks to

[94] The concept shows parallels to situated learning (e.g., Reinmann-Rothmeier & Mandl, 1998) and reflective models toward language teacher education (Wallace, 1991).

[95] CLL trainings that utilize experiential learning are occasionally referred to as integrative trainings, since training contents are integrated into CLL settings. Integrative programs are frequently opposed to indirect trainings, in which a standard or multilevel curriculum is the content that is taught in CLL settings (similar in Sapon-Shevin & Cohen, 2004). Due to general differences in pre-service and in-service education, such as goals and time factors (Winn-Bell Olsen, 1992), integrative trainings are very common in CLL in-service teacher education and less common in pre-service education.

their classrooms. The trainer assists to determine areas of appropriate use. Participants may also be assigned to groups by grade level and subject in order to plan lessons. Essential findings of the activities may be summarized in oral or written form. Structured recording sheets (Kagan & Kagan, 1998) or charts may be used (Sharan & Sharan, 1987).

The concept of *vicarious learning* is derived from Bandura's (1986) *social learning theory*. Related activities aim at the expansion of teachers' sense of general teaching efficacy. Training processes involve the exchange of successful CLL use to provide opportunities to experience effective CLL use vicariously (Ross, 1994).

The concept of *behavior modification* draws on microteaching principles[96]. Related activities are aimed at the improvement of teachers' instructional (Krol et al., 2002) and verbal (Gillies, 2004) behavior, and their sense of personal teaching efficacy (Ross, 1994). Behavior modification involves a three-step procedure, including the modeling of appropriate behavior in particular CLL situations, instruction, as well as role plays with feedback. At first, appropriate behavior is modeled by the trainer (e.g., Krol et al., 2002). Then, oral and/or written instructions that specify appropriate behavior are provided. Instructions may emphasize the learning context (e.g., Haag & Mischo, 2003), as well as teachers' instructional (e.g., Johnson et al., 1998) and verbal behavior (e.g., Gillies, 2007). Finally, appropriate behavior is trained in structured role play situations that are followed by expert feedback.

The concept of *cognitive behavior modification* draws on principles of theory-based and research-based interventions that consider teachers' subjective theories (Dann, 2007) or beliefs about CLL and education (Brody, 1993) as part of their professional knowledge that guide behavior. Related activities are aimed at the modification of cognitive representations of CLL and teachers' instructional behavior. Participants' feelings of safety are perceived as a prerequisite. The trainer provides a safe environment by creating a "collaborative climate" (Cooper & Boyd, 1998, p. 56) via modeling of related behavior, including thinking out loud, asking for help, providing assistance and feedback, as well as respecting others' beliefs. Training processes that address participants' beliefs include awareness raising activities that support the exploration of one's own and others'

[96] See e.g. Havers and Toepell (2002) for a description of micro-teaching and Klinzing (2002) for a research review on micro-teaching effectiveness.

beliefs. An example is “collaborative interviewing” (Brody, 1998, p. 32). Collaborative interviewing can tackle different areas of teachers’ beliefs about CLL and education such as histories and goals. The procedure involves two steps. First, teachers reflect on their own beliefs in pairs. Second, similarities and differences are discussed with the other participants and the trainer. Training processes utilized to foster cognitive reconstruction and behavior modification involve a three-step procedure (Dann, 2007). At first awareness of subjective theories and how they guide behavior is raised. Teachers may, for instance, describe their instructional behavior or difficult situations. The second step focuses on the development of behavioral alternatives. New knowledge is conveyed through texts or oral presentations and is elaborated in individual, pair work or group work activities. The third step involves the practical use of appropriate instructional behavior in simulations such as role plays and in the classroom. Practical use of CLL in the classroom is observed by another participant who provides feedback[97].

The concept of *personal and technical support* is linked with theory-based and research-based interventions that involve teacher collaboration as well as training and follow-up support for several months (Johnson & Johnson, 1998; Hertz-Lazarowitz & Calderón, 1994; Rotering-Steinberg, 2010). Related activities are targeted at CLL long term use and a high sense of general teaching efficacy. They occur during the pre-training, the training, and the post-training stage (Johnson & Johnson, 1998). During the *pre-training stage*, headmasters are asked to provide social and technical support through encouragement of participation in the training or reduction of teaching hours on training days (Johnson & Johnson, 1998). At the *training stage*, social and technical support is provided by trainers and participating colleagues. These colleagues become members of *collegial teaching teams* (Johnson & Johnson, 1998). Collegial teaching teams function as social and technical support groups that ensure commitment to CLL and its long term use. They meet inside and outside of training sessions to plan, teach, and reflect CLL activities or to observe others’ CLL lessons[98]. Johnson and Johnson (1998) suggest weekly meetings

[97] See also Wahl (2000, 2006) for principles of cognitive behavior modification.

[98] Some pre-service and in-service programs integrate CLL teacher training programs into organizational development, that is faculty collaboration in designing and implementing CLL programs at universities (Sharan, 2004) and staff collaboration, including cooperation among teachers, administrators, and non-teaching staff in planning and using CLL at schools (Brody & Davidson, 1998b). In this respect, approaches

outside of training sessions to ensure CLL transfer to the classroom. During the *post-training stage*, peer coaching through collegial teaching teams (Johnson & Johnson, 1998) and expert coaching through follow-up-support by trainers (Roy et al., 1985; Veenman & Denessen, 2001) are used to increase effective and ongoing CLL implementation[99]. Both, peer and expert coaching involve three stages. At first, the teacher determines the objective of the observation (e.g., coping with learners' off-task behavior). The peer or expert then observes and collects data. After the observation, the peer or coach presents observations made and provides supportive feedback (Roy, 1998; Veenman & Denessen, 2001).

4.2 Design of the Teacher Training for Cooperative Language Learning

This chapter presents the design of an advanced in-service teacher training that has been labeled *Teacher Training for Cooperative Language Learning*[100]. The training goal, theoretical background, structure as well as the objectives, contents and processes are specified.

The *training goal* is to foster language teachers' effective CLL use in the EFL classroom, that is, a frequent use of the CLL concept and related instructional principles presented above. Bearing in mind the research findings on language teachers' effective CLL use (Chap. 3), this goal can be accomplished if the training succeeds in developing language teachers':

1) theory-based and research-based knowledge about CLL and its use, that is, a clear CLL conception
2) favorable attitudes toward CLL use in the language classroom
3) favorable beliefs about CLL and its use

toward CLL teacher education show overall consistency with current trends in general teacher education (e.g., Havers & Helmke, 2002) and language teacher education (e.g., Crandall, 2000).

[99] Both approaches serve the same purpose, but differ in the level of teacher responsibility.

[100] The training is considered to be advanced as thought has been given to all variables that have been found to affect language teachers' effective CLL use (Chap. 3). Also, research-based training processes are systematically applied to foster the acquisition of relevant competencies and to change personality traits (Chap. 4.1).

4) positive subjective norms, that is, helpful perceptions of the likelihood that important others such as colleagues appreciate participants' CLL use in the EFL classroom
5) high sense of general teaching efficacy, that is, favorable perceptions of supportive contextual conditions via personal and technical support from colleagues, students, and parents that support effective CLL use
6) high sense of personal teaching efficacy, that is, favorable beliefs of being able to use CLL effectively
7) theory-based and research-based instructional and verbal behavior linked with CLL use

Training contents and *processes* of two established teacher trainings have been combined and slightly modified to accomplish the training goal. The training is largely based on the *Cooperation in the Classroom* training (Johnson & Johnson, 1998; Johnson, Johnson, & Holubec, 2002) and the *Group Training of Social Competencies* (Hinsch & Pfingsten, 2007). Modifications include the integration of relevant related instructional principles from the field of language education and implications of research findings on language teachers' CLL use in the language classroom (see Chap. 3).

Training contents adapted from the *Cooperation in the Classroom* training (Johnson & Johnson, 1998; Johnson et al., 2002) aim at the development of theory-based and research-based procedural knowledge about CLL and its effective use, favorable attitudes toward CLL and its use, favorable subjective norms toward CLL and its use, and a high sense of general teaching efficacy. Training processes include instructional principles linked with experiential learning, vicarious learning, and personal and technical support. Training contents adapted from the *Group Training of Social Competencies* (Hinsch & Pfingsten, 2007) aim at the development of positive beliefs about CLL and its effective use, theory-based and research-based instructional and verbal behavior, as well as a high sense of personal teaching efficacy. Training processes consist of instructional principles linked with vicarious learning, behavior modification, and cognitive behavior modification. Instructional principles of language education have been integrated into all activities, particularly those that emphasize task design as well as theory-based and research-based instructional and verbal behavior in CLL.

The training is *structured* into a pre-training, training, and post-training stage[101] as proposed by Johnson and Johnson (1998). It comprises six days of training (24 hours) and is conducted over a period of three months. The training phase is embedded in a pre-training and a post-training phase of ten months. The initial training is conducted in English and comprises six sessions. Training sessions one, three, and five last three hours and training sessions two, four, and six last five hours. Training sessions have a two-week time lag to provide opportunities for CLL use in the classroom. The addressees are middle and secondary school language teachers who voluntarily participate in the training in pairs or small groups from one school. The total number of participants depends on the number of CLL trainers, but should not exceed 30.

Figure 5 illustrates the structure of the CLL in-service training on a timeline.

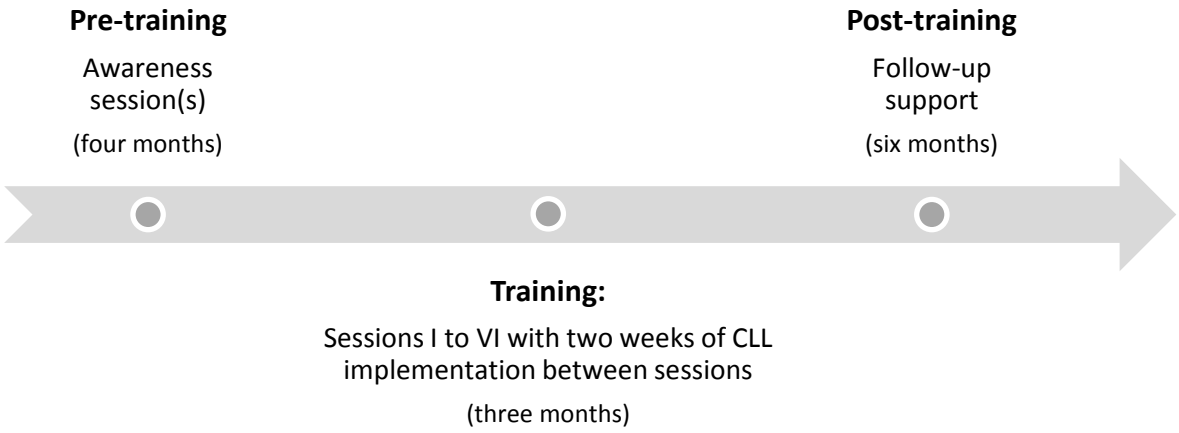

Figure 5: Structure of the CLL In-service Teacher Training

Each training stage has different objectives. The pre-training stage aims at favorable perceptions of personal and technical support needed for successful training. The training stage targets the development of theory-based and research-based procedural knowledge about CLL and its use, positive attitudes toward CLL, appropriate beliefs about CLL and its effective use, helpful perceptions of social norms, a high sense of general and personal teaching efficacy, and theory-based and research-based instructional and verbal behavior. The post-training stage aims at ongoing personal and technical support to ensure effective long-term use.

[101] A similar conceptual framework was proposed by Freeman (2001) to examine educational programs in Second Language Teacher Education (SLTE).

Training contents and processes differ according to the objectives at each training stage. At the *pre-training stage*, objectives, contents, and requirements of the training are presented in one or two awareness sessions. Moreover, school administrators are asked to encourage participation and to reduce the hours of teaching on training days (Chap. 4.1). At the *training stage*, participants become acquainted with CLL in theory, practice, and research (Chap. 2 and 3). Training processes involve instructional principles linked with the concepts (e.g., experiential learning) presented above. At the post-training stage, follow-up-support by trainers and colleagues is utilized to support ongoing CLL use (Chap. 4.1).

Table 2 summarizes the training objectives, contents, and processes.

Table 2: Training Objectives, Contents, and Processes of the Teacher Training for CLL

	Objectives	Contents	Processes
Pre-training	personal and technical support	training overview (i.e., goals, structure, requirements)	oral presentation
Training	• knowledge about CLL and its use (i.e., a clear CLL conception) • attitudes toward CLL use • beliefs about CLL and its use • subjective norms • general teaching efficacy • personal teaching efficacy • instructional and verbal behavior	• CLL in theory • CLL in practice and research (i.e., the language learning context, the language teacher, the language learner)	• experiential learning • vicarious learning • behavior modification • cognitive behavior modification • personal and technical support
Post-Training	personal and technical support	CLL long-term use (i.e., issues in CLL use)	• trainer follow-up support • collegial teaching teams

Training sessions one to four are largely based on the *Cooperation in the Classroom* training (Johnson & Johnson, 1998; Johnson et al., 2002). The training session format by Johnson et al., (2002, GI:26-GI:27) has basically been applied. In general, each session includes the following:

1) a r*eview* of the previous implementation assignment or “homework”

2) *a warm-up* activity leading to the topic of the session by means of a CLL simulation
3) *an introduction* to the session presenting its content and schedule
4) *a simulation* of CLL theory and practice and an oral and written reflection of the experience, including 1) a CLL simulation, 2) analysis of participants' experiences in terms of their personal and professional meaning, 3) conceptualization of CLL theory and practice through integration of theory and research, 4) transfer of the CLL technique experienced to the classroom via description and definition of areas of appropriate use
5) *closure* of the session in which the contents of the session are summarized and the "homework"[102] is specified

Sessions one and *two* focus on the development of theory-based and research-based knowledge about CLL and its use, positive attitudes toward CLL and its use, perceptions of subjective norms in favor of CLL, and a high sense of general teaching efficacy. Instructional principles are derived from experiential learning, vicarious learning, and personal and technical support.

Session one concentrates on teachers' attitudes toward CLL, research findings on instructional principles for structuring the language learning context (Chap. 3.1), the five basic elements of CLL (Chap. 3.1), the CLL techniques *Think-Pair-Share* and *Reading Comprehension Triads*[103], as well as the provision of personal and technical support (Chap. 3.2 and Chap. 4.1).

The session starts with an overview of the training and is followed by a *warm-up* activity that stresses participants' attitudes toward CLL and *Think-Pair-Share*. Participants are asked to: 1) write down their name in the center of an index card, 2) reflect upon their positive and negative experiences with team-based methods as a group member and as a teacher, and to write down their answers into a particular corner on the index card, and 3) to pair up with participants they do not know that well to discuss their experiences for three minutes. A time limit is given for each step. Teachers then present their own and

[102] Please see Table 12 in Appendix A for an overview of the homework assignments.
[103] Please see Table 13 in Appendix A for descriptions of CLL techniques used in the training.

others' experiences. The trainer[104] structures the reflection. Theory and research on the impact of appropriate and inappropriate use of instructional principles for structuring the language learning context and its effects on student interaction and learning (Chap. 3.1) are presented. The name and description of *Think-Pair-Share*, its transfer to the EFL classroom, and important features are first orally summarized and then written down on a structured form (App. B1)[105]. Afterwards, the trainer presents the content (see Table 15 in App. A) and the schedule of *session one*.

The *simulation* includes an activity that provides information on the five basic elements of CLL and *Reading Comprehension Triads*. Teachers are assigned to heterogeneous groups of three, using different types of candy numbered from one to three. The five basic elements, including six types of positive interdependence, are implemented in the activity. Teachers are asked to learn the five basic elements by reading a text, coming up with a new definition, and describing what the trainer did to implement the five basic elements in the activity (App. B1). Each group member takes either the role of the Reader, Recorder, or Checker in line with number on the candy (e.g., *no. one* is the *Reader*). A time limit is given. Afterwards, participants are randomly asked to present their results. The trainer revises the five basic elements and highlights relations between each element and his instructional behavior. The activity ends with group processing. Groups have to come up with three things that helped the group to function well and one thing that could be done better next time. The name, description and transfer of *Reading Comprehension Triads*, and important features are orally summarized and written down on a structured form.

The *closure* of the session reviews its contents and ends with the provision of personal and technical support to foster teachers' sense of general teaching efficacy. Participants are assigned to *base groups* (Chap. 3.1) based on group formation of the simulation. *Collegial teaching teams* (Chap. 4.1) are also formed. Language teachers are assigned to pairs or groups of three by grade level. They complete a slightly modified version of the *cooperative learning contract* (App. B1) by Johnson et al. (1998, p. 1:22). The contract gives emphasis to aspects learned in the training and their transfer to the classroom.

[104] The trainer will be considered as masculine in the following to improve readability.

[105] These forms are used for all CLL techniques presented in the training (please see Appendix B1).

After that, the "homework" is presented. Participants are asked to use *Think-Pair-Share* or *Reading Comprehension Triads* in at least one EFL class, and to read a text on issues in CLL and language support (App. B1). Technical support for using the two CLL techniques and the other CLL techniques presented in the training is provided by a visual presentation (App. B2), work sheets, the trainer's instructional and verbal behavior (Chap. 3.2), and the training manual (App. B1).

Session two places emphasis on theories linked with CLL (Chap. 2), as well as relevant research findings on student learning and achievement in CLL (Chap. 3.1), and the CLL techniques *Placemat* and *Jigsaw.*

The session starts with a *review* of teachers' use of *Think-Pair-Share* and *Reading Comprehension Triads* in base groups. Instructional principles linked with vicarious learning are utilized to increase participants' sense of general teaching efficacy. At first, teachers are asked to discuss their experiences and to complete a data summary chart (App. B1) in base groups. Then, their experiences are presented to the entire group and successes are celebrated.

The *warm-up activity* emphasizes teachers' attitudes toward CLL and the *Placemat* technique (App. B1). Teachers are asked to give reasons for CLL use in the EFL classroom. The technique involves three steps. Teachers work in randomly assigned heterogeneous groups of three. First, they write down their individual answers in one corner of the placemat. Second, they discuss their answers and write down their group answer in the center of the placemat. A time limit is given for the two steps. Later the results are presented in class. The trainer adds research-based benefits of CLL. Teachers' experiences are analyzed, *Placemat* is described, and its transfer is planned. The trainer then presents the content (see Table 15 in App. A) and the schedule of *session two*.

The *simulation* concentrates on theories linked with CLL and the *Jigsaw* technique. Teachers are assigned to heterogeneous groups of three. Each group member receives one of three complementary texts (App. B1). These members have to read the text and plan how to teach it to the group members. The next step is for teachers to meet in preparation pairs and practice-sharing pairs to plan their teaching. A time limit is given for each step. Participants then teach the information. Later, they are randomly asked to present their results. The trainer structures the presentation and summarizes theories of

social processes, language learning processes and language education linked with CLL (Chap. 2.1 to 2.3). Participants' experiences are analyzed, *Jigsaw* is described, and its transfer is planned.

The *closure* involves a base group meeting where teachers share what they have learned, present their implementation plans, and write a rational statement for CLL use in the EFL classroom. The "homework" is to use *Placemat,* to present a rational statement for CLL use to another person, and to read a text that provides theory-based reasons for CLL use in second language learning (App. B1).

Sessions three and *four* focus on instructional principles for effective CLL use (Chap. 3.1), the design of academic and social language skills tasks[106] (Chap. 3.1), and a high sense of general teaching efficacy (Chap. 3.2). Instructional principles are linked with experiential learning, vicarious learning, and personal and technical support.

Session three emphasizes language learning conditions (Chap. 3.1), the design of academic tasks (Chap. 3.1), and the CLL techniques *Pairs-Check* and *Gallery Walk.*

The session starts with a *review* of language teachers' use of *Placemat* in base groups (see *session two* for the procedure*)*.

The *warm-up activity* emphasizes teachers' use of the five basic elements and the *Pairs-Check* technique. The task is to correct mistakes in ten English sentences (App. B1). The trainer randomly assigns teachers to groups of four and asks them to form pairs within these groups. They then alternate correcting the sentences in pairs: one corrects a sentence while the other coaches and praises every right answer. After two sentences, the pairs of one group compare their results. Later, the results are presented and, if necessary, corrected by the trainer. The trainer presents decisions made when planning the activity regarding the use of the five basic elements, national performance and state-specific curriculum standards (*Excursus,* Chap. 3.1), as well as language learner characteristics (Chap. 3.3). After analyses of teachers' experiences, *Pairs-Check* is described and its transfer is planned (App. B1).

[106] The design of interactional tasks was not covered in the training since it requires long-term use of the entire CLL concept and learners' integrated use of linguistic, socio-cultural, and cognitive competencies.

The trainer presents the content (see Table 15 in App. A) and the schedule of *session three*.

The *simulation* focuses on personal and technical support for effective CLL use via co-planning, reflection, and problem solving. Participants plan a CLL activity that addresses academic language skills in pairs and practice presenting it. Technical support is provided through instructions for lesson planning and texts on heterogeneous grouping and roles in CLL (App. B1). Afterwards, a *Gallery Walk* is conducted. Lesson plans are posted in different areas of the room. Teachers present their plans to each other and provide feedback simultaneously. Time limits are given for each presentation. The trainer supported teachers to define grade-level and proficiency-level specific objectives based on national performance and state-specific curriculum standards as well as to integrate the five basic elements. After analyses of teachers' experiences, *Gallery walk* is described, and its transfer is planned.

The *closure* involves a base group meeting. Participants share what they have learned and their implementation plans. The "homework" is to use *Pairs Check* or *Gallery Walk*, and to read the texts in the handout on task difficulty, assignment of students to heterogeneous groups, and roles students can take (App. B1).

Session four places emphasis on social language skills, group monitoring, group processing (Chap. 3.1), and the CLL techniques *Inside-Outside-Circle, Pairs Check,* and *Gallery Walk.*

The session starts with a *review* of language teachers' use of *Pairs Check and Gallery Walk* in base groups (see *session two* for the procedure).

The *warm-up activity* stresses both social language skills learners need to work effectively in CLL groups and the *Inside-Outside-Circle* technique. The task is to name at least three skills learners need to work together effectively. The trainer randomly assigns participants to two groups and asks one group to form an inside and the other to form an outside circle. Participants work in pairs in these circles. After two minutes the trainer uses an acoustic signal and asks the outside circle to move "two partners to the right". The next step is for teachers to randomly present their results. The trainer adds social language skills and describes their connection with current national performance and state-specific curriculum standards (*Excursus,* Chap. 3.1). Participants' experiences are analyzed, *Inside-*

Outside-Circle is described, and its transfer is planned (App. B1). Afterwards, the trainer presents the content (see Table 15 in App. A) and the schedule of *session four*.

The first *simulation* demonstrates the five-step procedure for teaching social language skills (Chap. 3.1). A situation in CLL is presented in which one group member refuses to participate. Three language teachers act out the situation. The trainer classifies responses encouraging participation into language forms and gestures, and records them on a T-Chart with a "Looks like" and a "Sounds like" category. The social language skill "Encouraging participation" is defined. Teachers' experiences are analyzed and the instructional principles for teaching social language skills are presented and summarized on a structured form (App. B1). Next, participants plan a CLL activity that focuses on social language skills in pairs, and practice presenting it. Technical support is provided through instructions for lesson planning and additional information (App. B1). Afterwards, a *Gallery Walk* is conducted (see *Session III*).

The second *simulation* puts emphasis on group monitoring and *Pairs Check.* Differences between judging and observing and related instructional principles are stressed. Participants are randomly assigned to groups of three. Two members of each group complete the task. The task is to decide whether ten statements are descriptions or judgments and to put a "D" for a description and a "J" for a judgment. The third group member is the *Observer* whose task is to observe group members' use of the social language skills "encouraging" and "praising" using a structured observation form (App. B1). The trainer also observes the groups using the same observation form. Later, participants are randomly asked to present their results and to comment on their decisions. The trainer provides information on group monitoring by highlighting the need to observe CLL groups and to provide descriptive feedback. After that, the observers present their observations and talk about their experiences, the trainer presents his observations and the results are compared. Pairs of teachers who planned the social language skills activity together are asked to plan how they are going to observe their learners, and to complete a lesson planning form (App. B1). Three pairs are randomly asked to present their results.

The *closure* includes a base group meeting providing information on group processing. Training participants conduct a group processing activity in their base groups. The task is

to write down how much they appreciate each partner's help on an index card and give it to the person. They then share what they have learned and plan how they will use it in class. The "homework" is to read texts that provide information on teaching social skills, cooperative skills and language functions, observation of students in CLL groups, and group processing (App. B1). They are also asked to teach a social language skills lesson, and to conduct a structured observation and a group processing activity in class, as well as to use the *Inside-Outside-Circle or another CLL technique in class*[107].

Sessions five and *six* are largely based on the *Group Training of Social Skills* (Hinsch & Pfingsten, 2007). A similar format as for the first four sessions is used. Sessions basically include the following:

1) a r*eview* of previous "homework"
2) a *warm-up* activity that leads to the topic of the session
3) an *introduction* to the session, including the content and the schedule
4) an *explanation* of the origin and impact of instructional and verbal behavior, its role in classroom interaction, and related theoretical conceptions, and a *differentiation* of appropriate and inappropriate instructional and verbal behavior in CLL
5) *simulations* of appropriate instructional and verbal behavior in CLL[108] and reflection. The simulations include: instructions for appropriate instructional and verbal behavior in three different CLL situations, model role plays by the trainer with self-reinforcement and self-criticism, and structured role plays with video-feedback and positive reinforcement by other training participants and the trainer
6) *closure* of the session in which the contents of the session are summarized and the "homework" is specified

Sessions five and *six* focus on the development of language teachers' theory-based and research-based instructional and verbal behavior in CLL, research findings on appropriate instructional and verbal behavior, teachers' beliefs about CLL, and their sense of personal teaching efficacy (see Chap. 3.2). Instructional principles are derived from vicarious

[107] Table 14 in Appendix A provides an overview of *sessions one* to *four*.

[108] Simulations include three types of situations: 1) *Presenting* the task including the CLL method, 2) *Intervening* in CLL groups, and 3) Conducting group processing, and related language support (see App. B1).

learning, and a combination of principles of behavior modification and cognitive behavior modification (see Chap. 4.1).

Session five emphasizes participants' sense of personal teaching efficacy, an explanatory model of appropriate and inappropriate instructional and verbal behavior in CLL, as well as related theoretical concepts. Furthermore, stress is placed on teachers' beliefs about appropriate and inappropriate instructional and verbal behavior in CLL, research findings on the impact of teachers' instructional and verbal behavior in CLL and its role in classroom interaction. Appropriate instructional and verbal behavior when presenting a task and appropriate self-reinforcement and self-criticism are also of great importance.

The session starts with a *review* of the previous session and a discussion of the "homework" in base groups (see *session two* for the procedure).

The *warm-up* addresses participants' sense of personal teaching efficacy when conducting CLL. They are asked to complete six sentences on their perceived abilities when presenting a task, intervening in CLL groups, and guiding group processing individually, and to discuss their perceptions with a partner afterwards. A structured form with six sentences is used (App. B1). Three sentences indicate perceived competencies (e.g., "I feel competent when…") and three show areas in need of personal and technical support (e.g., "I would like to learn more about …"). Teachers present their individual partner's perceptions. The trainer structures the presentation. He then presents the content (see Table 15 in App. A) and the schedule of *session five*.

The explanation of the origin and impact of instructional and verbal behavior in CLL and its role in classroom interaction addresses teachers' beliefs about CLL. It includes an *explanatory model of appropriate/inappropriate instructional and verbal behavior in CLL*, which has been adapted from Hinsch and Pfingsten (2007). The explanatory model explains the origin of appropriate instructional and verbal behavior in CLL on the basis of cognitions, so-called *self-verbalizations*, and emotions. Instructional and verbal behavior in CLL is considered to rely on teachers' self-verbalizations, that is, their cognitions in a particular situation. According to the model, self-verbalizations are considered to impact on teachers' emotions and vice versa. Emotions are believed to affect teachers' behavior, which in turn influences their self-verbalizations in comparable situations in the future. In brief, positive or helpful self-verbalizations cause positive emotions and appropriate

instructional and verbal behavior. Negative or unhelpful self-verbalizations bring about negative emotions and inappropriate instructional and verbal behavior (App. B1). After the explanatory model is first described by the participants, it is explained by the trainer and then discussed with regard to its suitability to describe difficult situations inside and outside the CLL classroom. Afterwards, participants are asked to apply the model to situations in CLL and present their adaptations. The trainer checks for understanding of the model.

The differentiation tackles participants' beliefs about appropriate and inappropriate instructional and verbal behavior in CLL and its effects on CLL and student learning in a differentiation activity. The activity has been adapted from Hinsch and Pfingsten (2007) and adjusted to crucial situations in the CLL classroom (App. B1). Training participants are assigned to pairs. They receive a list of ten CLL situations and related teacher reactions. The task is to decide whether the described instructional and verbal behavior is appropriate or inappropriate by putting an "a" for appropriate and an "i" for inappropriate actions. They are also required to give reasons for their decisions based on implications of CLL theory, practice, and research (Chap. 2 and 3). The results are presented and discussed. The trainer provides the solutions as well as related theory, practical implications, and research findings (Chap. 3.2 and 3.3).

The *simulation* addresses participants' sense of personal teaching efficacy. It gives emphasis to appropriate instructional and verbal behavior when presenting a CLL task, and appropriate self-reinforcement and self-criticism. A three-step procedure is used (Chap. 4.1). First, *instructions* for appropriate instructional and verbal behavior when presenting a CLL task and related language support are provided in oral and written form (App. B1). Second, a *model-role play* is carried out by the trainer, who models appropriate instructional and verbal behavior when presenting a task, as well as appropriate self-reinforcement and self-criticism. The role plays are videotaped and evaluated. Before the role play, the trainer selects a situation from a list of seven situations for presenting a CLL task (App. B1). Based on the related instructions, he defines his goal and gives himself positive self-instructions such as "I can do it!" aloud. During the role play, the trainer uses almost appropriate instructional and verbal behavior to allow participants' identification. During the evaluation, the trainer stops the videotape for every sequence that shows

appropriate instructional and verbal behavior and states what he likes about his behavior and why he likes it. Then, he states what he could do better and gives resolutions for the next role play and performs it again. The next step is for participants to practice presenting a CLL task in similar structured role plays with feedback. They are assigned to heterogeneous groups of three or four with the trainer or one co-trainer per group. The trainer, co-trainers, and participants act as role play partners or observers. The experiential character of role plays is highlighted and participants are asked to not make it too difficult when acting as role play partners. Teachers select role play situations from the list of seven related situations for presenting a CLL task in accordance with the perceived degree of difficulty (App. B1). Role plays are conducted using the procedure modeled by the trainer. The trainer or co-trainer videotapes the role plays. Feedback is provided in a structured way, comparable to the procedure recommended by Hinsch and Pfingsten (2007). Role plays are performed twice and evaluated. The trainer or co-trainer asks the teacher performing a role play to look at things well done. The teacher then stops the videotape whenever he likes his actions, specifies, and explains them. If necessary, the trainer or co-trainer asks the teacher to stop the videotape, and assists the teacher to reformulate self-criticism into resolutions or to provide precise and descriptive feedback. Afterwards, the role play partners present their observations and provide positive feedback. The trainer or co-trainer also reinforces appropriate instructional and verbal behavior and self-reinforcement. The use of inappropriate instructional and verbal behavior is ignored. Instructional principles linked with vicarious learning are used to foster appropriate instructional and verbal behavior as other participants are reinforced by self-reinforcement and reinforcement by others.

The *closure* of the session summarizes the contents and teachers' learning processes in base groups. The "homework" is to use the conceptual framework (i.e., implementation of the five basic elements) including at least one of the CLL techniques covered in the training. It is also to practice presenting a CLL task, and to formulate three positive self-verbalizations that help to cope with difficult CLL situations.

Session six addresses participants' sense of personal teaching efficacy, helpful self-verbalizations, as well as appropriate instructional and verbal behavior when intervening in CLL groups, and when conducting group processing.

The session starts with a *review* of the previous session and a discussion of the "homework" in base groups (see *session two* for the procedure). The trainer reinforces teachers' use of appropriate instructional and verbal behavior.

The first *warm-up* emphasizes positive self-verbalizations. Participants present their self-verbalizations. After pointing out the impact of helpful and unhelpful self-verbalizations on emotions and behavior, the trainer presents the content (see Table 15 in App. A) and schedule of *session six*.

The first *simulation* deals with teachers' sense of personal teaching efficacy. It stresses appropriate instructional and verbal behavior when intervening in CLL groups as well as appropriate self-reinforcement and self-criticism. The procedure is identical with the simulation in *session five* (App. B1). Instructions for appropriate instructional and verbal behavior emphasize certain language learner characteristics (see Chap. 3.3) that need to be considered for interventions during CLL group work.

The second *warm-up* contrasts positive and negative self-verbalizations. One participant takes the role of an angel, another is a devil. The others are observers. The "angel" and the "devil" select a "difficult" situation in CLL and alternately state positive and negative self-verbalizations in accordance with their roles. Teachers' experiences are discussed.

The second *simulation* also is concerned with participants' sense of personal teaching efficacy. Emphasis is placed on appropriate instructional and verbal behavior when conducting group processing as well as appropriate self-reinforcement and self-criticism. The procedure is identical with the simulation in *session five* (App. B1).

The *closure* involves a base group meeting in which information on group processing is conveyed, participants share what they have learned, and plan CLL use in the language classroom. The "homework" is to use the conceptual framework (i.e., implementation of the five basic elements) including at least one of the CLL techniques covered in the training, and to practice intervening and group processing in CLL.

5 Preliminary Evaluation of the Teacher Training for CLL

The purpose of this pilot study was to examine the impact of the *Teacher Training for CLL* on German EFL teachers' CLL use as well as the perceived quality of the training.

Research goals included the investigation of the following:

- the impact of the training on German EFL teachers':
    - cognitions, including teachers' conceptions of CLL, intentions to use CLL, attitudes toward CLL, perceptions of subjective norms, as well as their sense of general and personal teaching efficacy
    - CLL use in the EFL classroom in terms of frequency and quality
- the perceived sense of actual behavioral control and the perceived quality of the training

The study was conducted at four middle and secondary schools in the northwest of Germany between March 2008 and December 2009. At two of these schools, identical trainings were conducted. Training participants were the treatment group (TG) of the study. EFL teachers who received no training served as the comparison group (CG).

The trainings included three stages. The *pre-training stage* ranged from the beginning of March until the end of August 2008. During this stage, an awareness session was conducted and the organizational support structures of the training (see Chap. 4.2) were established.

The *training stage* ranged from September until December 2008. During this stage, the investigator trained two groups of German EFL teachers (i.e., treatment group). The pretest and posttest surveys were conducted in the treatment and the comparison group on the first and the last day of training (September 2008 - December 2008).

The *post-training stage* ranged from January until June 2009. During this stage, the trainer provided follow-up support to treatment group teachers through monthly meetings that focused on issues in CLL use. Follow-up test questionnaires were administered and collected six months (June 2009) after the formal training to all participants of the study.

5.1 Method

The study was a field-based intervention study with a quasi-experimental design (Rost, 2013). Data on dependent variables (see Table 3) was obtained by a non-randomized two-group plan with pretest, treatment, posttest and follow-up test (cf., Rost, 2013).

The data was collected from teacher and student surveys to control effects of social desirability in teacher responses. 355 students from 19 EFL classes taught by one of the treatment and comparison group EFL teachers completed the surveys the same week EFL teachers were tested.

Figure 6 illustrates the design of the study on a timeline.

Figure 6: Design of the Study

Additional data on treatment group EFL teachers' sense of actual behavioral control as well as the perceived quality of the training as a whole and the perceived quality of each session was obtained on different measurement points. Treatment group EFL teachers' sense of actual behavioral control was examined on a follow-up test twelve months after the training (i.e., December 2009). Data on their perceptions of the quality of the entire training was gathered on the posttest. Perceptions of the quality of each training session were surveyed after every session.

The following **research questions** and related **research hypotheses** guided the study.

The **first research question (R 1)** that guided the investigation was:

What is the impact of the training on EFL teachers' cognitions?

The related **research hypotheses H 1.1 to H 1.6** were:

Hypotheses 1.1 to 1.6: Cognitions

H 1.1: The training participants will develop more theory-based and research-based CLL conceptions of the CLL concept presented in the training from the pretest to the posttest and follow-up test than the EFL teachers without treatment.

H 1.2: The training participants will show stronger intentions to use CLL in the EFL classroom from the pretest to the posttest and follow-up test than the EFL teachers without treatment.

H 1.3: The training participants will develop more positive attitudes toward CLL use from the pretest to the posttest and follow-up test than the EFL teachers without treatment.

H 1.4: The training participants will perceive more subjective norms toward CLL use from the pretest to the posttest and follow-up test than the EFL teachers without treatment.

H 1.5: The training participants will develop a greater sense of general teaching efficacy from the pretest to the posttest and follow-up test than the EFL teachers without treatment.

H 1.6: The training participants will develop a greater sense of personal teaching efficacy from the pretest to the posttest and follow-up test than the EFL teachers without treatment.

The **second research question (R 2)** that guided the investigation was:

What is the impact of the training on EFL teachers' use of CLL in the EFL classroom?

The related **research hypotheses H 2.1** to **2.5** were:

Hypotheses 2.1 to 2.5: CLL Use

H 2.1: The training participants will use CLL more often in their EFL classrooms from the pretest to the posttest and follow-up test than the EFL teachers without treatment.

H 2.2: The EFL students of the training participants will perceive a higher use of CLL from the pretest to the posttest and follow-up test than the EFL students of the teachers without treatment.

H 2.3: The training participants will use the instructional principles presented in the training more often from the pretest to the posttest and follow-up test than the EFL teachers without treatment.

H 2.4: EFL students' perceptions of the frequency of training participants' use of instructional principles will match teacher ratings of use of instructional principles.

H 2.5: The training participants will use German as the language of instruction less often from the pretest to the posttest and follow-up test than the EFL teachers without treatment.

The **third research question (R 3)** that guided the investigation was:

What are EFL teachers' perceptions of the quality of the *Teacher Training for CLL*?

Based on the research questions and the related hypotheses, relevant concepts were operationalized into one independent and nine dependent variables.

Table 3 presents the independent and dependent variables of the study.

Table 3: Independent and Dependent Variables of the Study

Independent Variable	Dependent Variables
Teacher Training for CLL	**Cognitions**
	• CLL conception • intention to use CLL in the EFL classroom • attitude toward CLL use • perceived subjective norm toward CLL use • sense of general teaching efficacy • sense of personal teaching efficacy
	CLL Use
	• frequency of CLL use • quality of CLL use, including the use of instructional principles and German as the language of instruction

In addition, EFL teachers' sense of actual behavioral control as well as the perceived quality of the training, including the perceived quality of the entire training and each training session was examined.

5.2 Methods of Measurement

The dependent variables were surveyed by using items and scales of established German and English questionnaires. The English ones were translated into German by the investigator and back-translated into English by a native speaker (i.e., a lecturer from the English Department at the local university). The revised German instruments were tested prior to the study with a sample of pre-service EFL teachers to determine instrument reliability, readability, and clarity (G. F. Meyer, 2010).

Research Question1 (Hypotheses H 1.1 to 1.6): Cognitions

EFL teachers' *CLL conceptions* **(H 1.1)** were measured with an open-ended item adapted from Schnebel (2003) that asked participants for a definition of CLL *("Please give a definition of your understanding of cooperative learning."*). The original German item was used.

EFL teachers' *intentions to use CLL in the EFL classroom* **(H 1.2)** were assessed with one item that was constructed according to guidelines for instrument construction on the

basis of the *TpB* (Ajzen, 2006a) and an item by Schnebel (2003). Participants responded to the item, "*In the future I would like to use cooperative learning procedures in my English classes"* on a four-point scale where answers ranged from: *'less'*, *'as much as now'*, *'more'*, to *'considerably more'*. The item and the responses were worded in German.

EFL teachers' *attitudes toward CLL use in the EFL classroom* **(H 1.3)** were examined with a scale by Ghaith (2004). It consisted of eleven items which dealt with potential positive outcomes (e.g., *"My use of cooperative learning in the English classroom would increase student learning because students learn from each other in social situations."*), as well as negative outcomes of CLL (e.g., *"My use of cooperative learning in the English classroom would be problematic because some students would be off-task and noisy."*). Responses to the five-point bipolar statements ranged from '*very unlikely'* to '*very likely'*. The English scale was translated into German.

EFL teachers' *perceptions of subjective norms toward CLL use* (**H 1.4)** were assessed with a scale taken from Ghaith (2004). Participants responded to eight items on a five-point bipolar scale that measured the likelihood to which important others such as other teachers or students would appreciate teachers' CLL use in EFL classes. Responses ranged from *'very unlikely'* to *'very likely'*. The original English scale was translated into German.

EFL teachers' *sense of general teaching efficacy* (**H 1.5**) was measured with one scale by Ghaith (2004) consisting of ten items that addressed external factors of perceived behavioral control such as the availability of teaching materials (e.g., "*Indicate the likelihood that the following factors will be available for you to use CLL: – having available resources (funding, curriculum materials, supplies and equipment, etc.*"). Five-point bipolar responses ranged from '*very unlikely'* to '*very likely'.* A translated German version of the English scale was used.

EFL teachers' *sense of personal teaching efficacy* (**H 1.6**) was measured with one scale by Ghaith (2004). Nine items examined EFL teachers' sense of personal teaching efficacy by addressing internal factors of perceived behavioral control such as the perceived ability to handle difficult students (e.g., "*When I really try I get through to most difficult students.*"). Responses on a six-point bipolar scale ranged from *'strongly disagree'* to *'strongly agree'*. The English scale was translated into German.

The validity of the four scales above was established by previous research (Gibson & Dembo, 1984; Lumpe, Haney & Czerniak, 1998). The internal consistencies (i.e., alpha reliabilities) ranged from α = .68 and α = .78 in previous research (Ghaith, 2004). Alpha reliabilities in the present study ranged from α = .63 and α = .83 on the post-test[109]. Alpha reliabilities were determined using data of the treatment and the comparison group teachers.

EFL teachers' sense of *actual behavioral control*, that is, external factors that affect actual CLL use in the EFL classroom, was surveyed with two open-ended items that concerned factors facilitating or impeding regular CLL use in the EFL classroom (e.g., item two: "*Several difficulties often impede CLL use. Which boundaries are true for you and accordingly for your school? When answering this question please think of your EFL classes."*) One item was adapted from Schnebel (2003) and the other was formulated based on related literature (Ghaith, 2004; Koutselini, 2008/2009; see also Rotering-Steinberg, 2000).

Research Question2 (Hypotheses H 2.1 to 2.5): CLL Use

The *frequency of EFL teachers' CLL use* **(H 2.1)** was assessed by two items. Both items were designed according to guidelines for constructing a *TpB*-questionnaire (Ajzen, 2006a). The total number of EFL lessons taught in one EFL learning group, in which participants were willing to use CLL, was determined by the first item. The second item examined the frequency of CLL use within the last two weeks (i.e., *"How often have you used cooperative learning procedures in your English classes in the last two weeks?"*) on a scale ranging from *'not at all'* to *'seven to eight times'* and an open response (i.e., *'other'*). The items were worded in German.

Student perceptions of the frequency of EFL teachers' CLL use (**H 2.2**) were measured by two items almost identical with those that measured teachers' perceptions of their CLL use. Item one was open-ended and asked for the number of English lessons per week. The frequency of CLL use within the last two weeks on a scale ranging from *'not at all'* to

[109] Low alpha reliabilities were identified for perceived *subjective norms* (α = .32) and *attitudes toward CLL* (α = .53) on the pretest, and *sense of general teaching efficacy* (α = .63) on the follow-up test (please see also Table 16 in App. A).

'7-8 times' or *'other'* was examined by item two (i.e., *"How often have you worked with a partner or in a group in the last two weeks?"*). The items were worded in German.

The *quality of EFL teachers' CLL use* (**H 2.3** to **2.5**) was assessed by means of *teachers' use of instructional principles* presented in the training **(H 2.3 and H 2.4)**, and the *frequency of use of German as the language of instruction* **(H 2.5)**.

Teachers' use of instructional principles **(H 2.3)** was assessed with ten single items taken from the *Questionnaire of Use of Cooperative Learning Groups* by Johnson and Johnson (unpublished)[110]. The items emphasized the group size, group composition, the five basic elements, including positive interdependence (i.e., resource and task interdependence), individual accountability (i.e., statement of way of evaluation), face-to-face promotive interaction (i.e., classroom arrangement and interaction within CLL groups), social language skills (i.e., acquisition of social language skills), group processing (i.e., evaluation of group processes), as well as teachers' instructional behavior (i.e., intervening in CLL groups). EFL teachers rated the frequency of use of the instructional principles. Responses ranged from *'almost never'* to *'almost always'* on a five-point scale. Each item contained subordinate items. For example, the item *"How do you assign students to cooperative learning groups?"* involved four subordinate items: 1) "*Students choose who they want to work with",* 2) *"I assign students of the same ability to groups",* 3) *"I assign students of different abilities to a group", and 4) "Students are randomly assigned to groups".* A translated German version of the English items was used.

Student perceptions of the frequency of training participants' use of instructional principles **(H 2.4)** were measured with almost the same items (e.g., *"If you are working in groups, how are the groups formed?"[…]*). A translated German version of the English items was used.

The *use of German as the language of instruction* **(H 2.5)** was assessed with a scale consisting of eleven items taken from Helmke et al. (2008). The scale dealt with the use of German as the language of instruction in certain situations, such as distractions (i.e., "How often do you use German in the following situations?" – e.g., "distractions").

[110] Please contact the authors to obtain a copy of the questionnaire. A Japanese translation of the questionnaire was used in a study by Nishinaka and Sekita (2010).

Responses on the four-point scale could range from '*never*' to '*often*'. The original German scale was utilized.

The reliability of the scale was proven by Helmke et al. (2008). The internal consistency (i.e., alpha reliability) was α = .89. Alpha reliability in the present study was α = .87 on the posttest. It was determined using treatment and comparison group data.

Research Question 3: Quality of the Training

Participants' perceptions of the quality of the training as a whole were measured with a training evaluation form on the posttest (Johnson & Johnson, not published)[111]. Six items measured the perceived quality of the training, for example, by addressing the appropriateness of contents. Training participants responded on a five-point scale from '*very bad*' to '*very good*'. Another two items surveyed the perceived usefulness of the training for CLL use in the EFL classroom and the overall impression. Responses ranged from '*very bad*' to *'very good*'. In addition, one item assessed the number of training sessions attended, and an open-ended item asked for additional comments. A translated German version of the English items was used.

Participants' perceptions of each training session were measured with an evaluation form administered at the end of every training session. It examined training participants' perceptions of the content and usefulness of each training session. Participants rated the value of the content discussed in the training session and the usefulness of the training session for the use of CLL in the EFL classroom on a five-point scale from '*low*' to '*high'.* An open-ended item after each item asked for additional comments and suggestions. The original English version was translated into German.

A cover letter explained the purpose of the study, and a coding system consisting of a four character code of letters and digits was used to designate respondents in all surveys.

Demographic information with regard to EFL teachers' backgrounds and characteristics was also obtained. Items referred to gender, age, and school type, grade levels taught during the study, years of teaching experience, employment status, previously attended CLL teacher trainings (i.e., training date and place, name of the trainer as well as hours

[111] Please contact the authors to obtain a copy of the questionnaire.

spent in training), hours of teaching EFL classes per week, and EFL teachers' qualification (please see Appendix B3 for the survey instruments).

6 Results

This chapter presents the research findings of the study. The results are organized by research questions and hypotheses.

6.1 Participants of the Study

The participants in this study were 19 EFL teachers and 355 students attending the fifth through eleventh grade at four different schools (i.e., three German "*Hauptschulen*" and one German "*Integrierte Gesamtschule*") located in the north-west of Germany.

The schools and EFL teachers were selected based on their interest in using CLL in the EFL classroom. Requirements for participation also included school administrators agreeing to support participants' CLL use through personal encouragement and a reduction of teaching hours on the days of training, as well as teachers agreeing to regularly attend the training and to use CLL in at least one of their EFL classrooms.

Eleven treatment group teachers were trained between September 2008 and December 2009. Eight EFL teachers participated in the study as a comparison group and received no training.

Five treatment group teachers worked at a "Hauptschule" and six at a comprehensive school. In the comparison group four teachers worked at a "Hauptschule" and four at a comprehensive school[112].

The teacher sample comprised fourteen female and five male EFL teachers. The average age of EFL teachers was 44 (M = 44.21, SD = 10.94) and ranged from 29 to 59 years. The average number of teaching years was 18 (M = 17.67, SD = 14.00). The years of teaching experience ranged from one to 37 years. Thirteen EFL teachers worked full-time and six part-time. Seventeen teachers stated they had a teaching degree in English. Fourteen had studied English as a major and three as a minor. Two had other qualifications, including the "Pitman" and the "Cambridge" certificate. One teacher per group had received prior training on CLL methods.

[112] *School 1* was a German "*Hauptschule" (*n = 7; n_{tg} = 5, n_{cg} = 2*)*, *school 2* a German comprehensive school *(*n = 10; n_{tg} = 6, n_{cg} = 4*)*, and *school 3 (*n_{cg} = 1*)* and *school 4 (*n_{cg} = 1*)* were German "*Hauptschulen"*.

The treatment and the comparison group mainly differed with regard to gender, age, years of teaching experience and type of employment. In the treatment group 64% were female and 36% male. In the comparison group the percentage of female teachers was 87.5% and 12.5% of male teachers. The average age of treatment group teachers was 47 years (*M* = 47.27, *SD* = 10.17) and 40 (*M* = 40.87, *SD* = 11.85) of comparison group teachers. The average years of teaching experience was 19 (*M* = 19.34, *SD* = 15.38) in the treatment group and 14 (*M* = 13.97, *SD* = 14.65) in the comparison group. The treatment group also included more EFL teachers working part-time (tg = 45.45%; cg = 12.50%). These differences limit comparability of the treatment and the comparison group. Table 4 presents demographic information about the participating EFL teachers.

Table 4: Demographic Information about Participating EFL Teachers

		Treatment Group	Comparison Group
Gender	female	4	7
	male	7	1
Age Range	20-30 years	1	1
	31-40 years	2	4
	41-50 years	3	1
	over 50 years	5	2
Teaching Experience	0-5 years	3	3
	6-10 years	1	2
	11-15 years	—	—
	16-20 years	2	—
	21-25 years	—	—
	more than 25 years	5	3
Full / Part Time	full-time	6	7
	part-time	5 (18-25 hours)	1 (9 hours)
Teaching Degree	yes	10	7
	no	1	1
CLL-Trainings Attended	yes	1	1
	no	10	7
Total		11	8

The participants in the study were asked to select one EFL class for major CLL use. From the treatment group, three teachers decided to use CLL in the lower grades (grades five to seven), two in the intermediate grades (grades eight to nine), and three in the higher grades (grades ten to eleven). From the comparison group, three teachers chose to use CLL in the lower grades (grades five to seven), three in the intermediate grades (grades eight to nine), and one in the higher grades (grades ten to eleven).

The student sample included 355 EFL students in the grades five through eleven with an age range from ten to eighteen years. 16 students from the original sample (N = 371) were dropped from the analysis because of a misunderstanding of the instructions, unreliable responses, or no responding on one of the three measures. A total of 207 EFL students were considered as the treatment group and the other 148 as the comparison group. Comparability of the treatment and the comparison group students is limited by their age and number. The treatment group includes a higher number of older students attending higher grades than the comparison group. Table 5 presents the student sample with regard to grade levels.

Table 5: Demographic Information about Participating Students

Grades	Treatment Group	Comparison Group
Lower	n = 81	n = 72
Intermediate	n = 58	n = 58
Higher	n = 68	n = 18
Total	**n_{tg} = 207**	**n_{cg} = 148**

6.2 Evaluation of Training Effectiveness

The study combined quantitative and qualitative methods of data analyses[113]. Quantitative data was investigated using descriptive and inferential statistics operated by *Excel*, *SPSS*, and *R*. Qualitative data was analyzed with the *structured content analyses method* (Mayring, 1996, 2008).

[113] See Mayring, Huber, Gürtler, and Kiegelmann (2007) for mixed methodology in psychological research.

The **first research question (R 1)** that guided the investigation was:

What is the impact of the training on EFL teachers' cognitions?

In the related research hypotheses (**H 1.1 to H 1.6**), it was predicted that EFL teachers' CLL conceptions, intentions to use CLL, attitudes toward CLL use, perceived subjective norms toward CLL use, and their sense of general and personal teaching efficacy would improve in the treatment group from the pretest to the posttest and follow-up test and that these changes would be greater than those of the comparison group. In addition, EFL teachers' sense of actual behavioral control to use CLL in the EFL classroom was surveyed.

To examine **EFL teachers' cognitions (R 1)** and related research hypotheses **H1.1** to **H 1.6**, quantitative and qualitative data from the treatment and the comparison group was analyzed. Examination of teachers' sense of actual behavioral control involved analyses of qualitative data from the treatment group only.

Qualitative data on *EFL teachers' CLL conceptions* **(H 1.1)** was analyzed with the *structured content analyses method* (Mayring, 1996, 2008) and three chi-square tests. Responses from the two groups given on the pretest, posttest, and follow-up test measures were compared. Prior to the analysis, a coding system was developed based on a review of related literature (Brody, 1998; Hennessey & Dionigi, 2013). The coding system distinguished two CLL conceptions: CLL as a technique and CLL as a procedure (Chap. 1 and 2). These conceptions were linked with sub-conceptions which addressed: teachers' locus of control and sense of authority, teachers' role in general, decision making, and the nature of knowledge and knowing. The level of CLL conception was graded on a 3-point scale: 1) misconception, 2) fuzziness, 3) clarity. The data was analyzed by the investigator and a graduate student of psychology separately and then compared for consistency. The coding system was revised after the first application based on teachers' responses and a literature review. The characteristics of the two CLL conceptions were extended with regard to the associated teacher's role, namely, the role as an *instructor and manager* for the technique-oriented view on CLL, and the teacher's role as a *facilitator, encourager, and orchestrator* for the procedure-oriented view on CLL. Moreover, related sub-conceptions were summarized into: 1) *teachers' sense of authority in CLL,* which contrasts a learner-centered view with teacher instruction, and a learner-centered view with teacher support, 2) *decision making in CLL,* which differentiates a prescriptive technique,

and a theory-based and reflection-based instructional procedure (i.e., the CLL concept underlying this thesis), and 3) *learning goals and processes* in CLL, which contrasts academic competencies and processes, as well as academic and social competencies and processes. Responses were assigned to one of the two CLL conceptions and rated as 1) limited, 2) general or 3) detailed. Those matching the definition of CLL as an instructional technique, including one or more of the related sub-conceptions were considered to belong to this category. They were defined as limited because of lacking essential instructional principles of CLL (see Chap. 3.1 and 3.2). Teacher responses were linked with CLL as an instructional procedure if assignment to the second CLL conception, including one or more of the related sub-conceptions was possible. Related teacher responses were defined as general if one essential instructional principle of CLL was emphasized. Detailed CLL conceptions addressed several essential instructional principles. CLL definitions and the related sub-conceptions not meeting one of the conceptions or being too fuzzy were dropped from the analyses. The final coding system and a complete list of EFL teachers' CLL conceptions in the original German version and the English translation can be found in Appendix B4.

Two CLL conceptions and related sub-conceptions emerged from data analyses on the three measures. CLL was considered as an instructional technique or as an instructional procedure. The level of EFL teachers' CLL understanding ranged from limited to detailed.

On the pretest, the treatment and the comparison group EFL teachers (N = 19, n_{tg} = 11; n_{cg} = 8) in the main viewed CLL as an instructional technique, i.e., pair work and group work settings provided by the teacher, in which learners work together on an academic task, and take more responsibility as the teacher offers little assistance. The level of CLL conceptions was predominantly limited (N = 18, n_{tg} = 11; n_{cg} = 7). The response of one comparison group teacher reflected general understanding of CLL as an instructional procedure. This teacher (*Teacher 13*) had participated in a CLL teacher training that was based on the *Learning Together method* prior to this study. Table 6 presents teachers' CLL conceptions and the units of frequency on the pretest. Please see Appendix B4 for detailed analyses of EFL teachers' CLL conceptions on the pretest.

Table 6: EFL Teachers' CLL Conceptions on the Pretest

Conception	Sub-conception	Criteria	Frequency
CLL as an Instructional Technique: Learners work together on a given task in pairs and groups.		*Students work together and help one another.*	18 (n_{tg} = 11; n_{cg} = 7)
	Sense of Authority: learner-centered with teacher instruction	*A rather student-centered learning process/creation of the learning situation in which students take more responsibility.*	8 (n_{tg} = 6; n_{cg} = 2)
	Decision Making: pair work and group work techniques	*[…] the completion of tasks in interactive group compositions.*	17 (n_{tg} = 9; n_{cg} = 8)
	Learning Goals and Processes: academic learning	*[…] ways of learning in which two or more students work together on subject matter […].*	8 (n_{tg} = 5; n_{cg} = 3)
CLL as an Instructional Procedure: Structured learner cooperation and explicit learning and reflection of academic and social competencies.		*ways of learning that are student-centered in which students learn together and I, as a teacher, "draw back" but provide support (the content-related work, the social cooperation)*	1 (n_{cg} = 1)
	Sense of Authority: student-centered with teacher support	*ways of learning that are student-centered in which students learn together and I, as a teacher, "draw back" but provide support (the content-related work, the social cooperation)*	1 (n_{cg} = 1)
	Decision Making: theory and reflection	—	—
	Learning Goals and Processes: academic and social learning	—	—

On the posttest (*N* = 17), the training participants (n_{tg} = 11) predominantly viewed CLL as an instructional procedure (n_{tg} = 7) that emphasizes supported learner cooperation, and can be used in the EFL classroom to foster academic and social learning based on theory and reflection. Three responses reflected a technique-oriented view. The response of one teacher (*Teacher 9*) was not valid. The comparison group teachers (n_{cg} = 7) considered CLL as an instructional technique, that is, pair work and group work classroom arrangements that stress instructed learner collaboration, and mainly aim to improve academic learning but have a positive impact on social learning. The level of teachers' CLL conceptions on the posttest differed in line with the views on CLL. CLL conceptions by most of the treatment group teachers reflected the CLL concept presented in the training. Five were

general and two detailed. Three CLL definitions were classified as limited. The responses of the comparison group teachers were all categorized as limited. One comparison group teacher (*Teacher 17*) did not give a CLL definition. Table 7 presents teachers' CLL conceptions and the units of frequency on the posttest. Please see Appendix B4 for detailed analyses of EFL teachers' CLL conceptions on the posttest.

Table 7: EFL Teachers' CLL Conceptions on the Posttest

Conception	Sub-conception	Criteria	Frequency
CLL as an Instructional Technique: Learners work together on a given task in pairs and groups.		*[…] students learn together in pair work and group work forms of classroom arrangement […]*	10 (n_{tg} = 3; n_{cg} = 7)
	Sense of Authority: learner-centered with teacher instruction	*Students work in pairs and small groups on an assignment, sort out steps of work and distribution of tasks, present a result*.	4 (n_{tg} = 2; n_{cg} = 2)
	Decision Making: pair work and group work techniques	*Students work in pairs and small groups on an assignment […].*	9 (n_{tg} = 2; n_{cg} = 7)
	Learning Goals and Processes: academic learning and social skills as a by-product	*In cooperative learning students support each other's learning by working together in pair work and group work. In that way, social learning is fostered as well.*	7 (n_{tg} = 2; n_{cg} = 5)
CLL as an Instructional Procedure: Structured learner cooperation and explicit learning and reflection of academic and social competencies.		*Students work together in groups. Group members are assigned by certain methods so that social skills can take effect. Students work together who otherwise would hardly come into contact with each other. Academic and social learning!*	7 (n_{tg} = 7)
	Sense of Authority: learner-centered with teacher support	*Working together on a task taking into consideration mutual encouragement, praise and acknowledgement of individual work contributions.*	3 (n_{tg} = 3)
	Decision Making: theory and reflection	*Cooperation consists of mutual responsibility for the learning result. The roles (Reader, Writer, Checker) support this as well as the fact that each group member needs to be able to present the results individually.*	5 (n_{tg} = 5)
	Learning Goals and Processes: academic and social learning	*social learning and learning of contents via cooperative methods*	4 (n_{tg} = 4)

On the follow-up test (N = 15), most of the training participants (n_{tg} = 7) viewed CLL as an instructional procedure that is linked with distinct instructional principles which consciously need to be applied to provide settings that foster learner autonomy, and in turn, the acquisition of academic and social competencies. For most of the comparison group teachers (n_{cg} = 5) CLL remained an instructional technique, including pair work and group work settings, in which learners work together and structure the learning process by themselves to complete academic tasks. Comments by the treatment group teachers predominantly reflected the CLL concept discussed in the training. Six responses were classified as general and one as detailed. The definition by *Teacher 7* was classified as limited. Two other treatment group teachers (*Teacher 2* and *Teacher 10*) did not give a CLL definition. The response of one treatment group teacher (*Teacher 4*) was dropped from the analyses because it was too fuzzy. Responses of most of the comparison group teachers were limited. One teacher showed general understanding (*Teacher 13*). Two comparison group teachers did not give a CLL definition (*Teacher 12* and *Teacher 17*). Table 8 outlines teachers' CLL conceptions and the units of frequency on the follow-up test. Please see Appendix B4 for detailed analyses of EFL teachers' CLL conceptions on the follow-up test.

Comparison of data from the pretest, posttest and follow-up test overall indicated a shift from technique-oriented CLL conceptions (n_{pre} = 11) to procedure-oriented ones ($n_{post/fo\text{-}up}$ = 7) in the treatment group. While most of the training participants tended to describe CLL as an instructional procedure as defined in the teacher training on the posttest (n = 7) and the follow-up test (n = 7), most of the comparison group teachers continued to consider it as an instructional technique on these measures (n_{post} = 7; $n_{fo\text{-}up}$ = 5).

Three chi-square tests were performed to further examine the relation between the two groups and the two CLL conceptions. The relation between these variables was significant on the posttest, X^2(1, N =17, 8.33, p < .0039 (with p = .05) and on the follow-up test, X^2(1, N = 14, 7.02, p < .008041 (with p = .05). The comparison group teachers were less likely to define CLL as an instructional procedure than were the treatment group teachers.

There was no statistical difference in CLL conceptions between the two groups on the pretest, X^2(1, N =19, 1.45, p < .228305 (with p = .05). CLL conceptions did not differ by groups before the treatment.

Table 8: EFL Teachers' CLL Conceptions on the Follow-up Test

Conception	Sub-conception	Criteria	Frequency
CLL as an Instructional Technique: Learners work together on a given task in pairs and groups.		*Students work in groups/pair-groups, coordinate their work among themselves, conduct exercises and projects.*	6 (n_{tg} = 1 n_{cg} = 5)
	Sense of Authority: learner-centered with teacher instruction	*Students work in groups/pair-groups, coordinate their work among themselves, conduct exercises and projects.*	3 (n_{tg} = 1 n_{cg} = 2)
	Decision Making: pair work and group work techniques	*pair work, group work*	6 (n_{cg} = 6)
	Learning Goals and Processes: academic learning	joint work on learning contents	5 (n_{tg} = 2; n_{cg} = 3)
CLL as an Instructional Procedure: Structured learner cooperation and explicit learning and reflection of academic and social competencies.		*A form of learning which aims at student autonomy and accountability by way of integrating group processes within the whole learning group.*	8 (n_{tg} = 7) (n_{cg} = 1)
	Sense of Authority: learner-centered with teacher support	*The learning process should be successful for all small group members through self-responsible, autonomous-division of labor steps. Each member is accountable for the process and reflects on it regularly.*	6 (n_{tg} = 6)
	Decision Making: theory and reflection	*A learning group works in a coordinated/structured way toward common goals so that the learning process increases.*	6 (n_{tg} = 6)
	Learning Goals and Processes: Academic and social learning	*conveying academic and social competencies*	2 (n_{tg} = 1; n_{cg} = 1)

Quantitative data on *EFL teachers' intentions to use CLL in the EFL classroom* (**H 1.2**), *teachers' attitudes toward CLL* (**H 1.3**), *perceived subjective norms* (**H 1.4**), *sense of general teaching efficacy* (**H 1.5**) and *sense of personal teaching efficacy* (**H 1.6**) was analyzed using descriptive and inferential statistics.

Because of the small sample size, descriptive analyses were performed for each individual teacher and for the two groups on all measures. Median scores were computed for individual developments. Analyzing the group data involved calculating the median scores

and ranges. Scales analyzed this way included *EFL teachers' attitudes toward CLL* (**H 1.3**), *perceived subjective norms* (**H 1.4**), and their *sense of general teaching efficacy* (**H 1.5**).

Descriptive analyses for *EFL teachers' intentions to use CLL in the EFL classroom* (**H 1.2**) and their *sense of personal teaching efficacy* (**H 1.6**) involved calculation of median scores for individual developments. To reduce the chance of inflation of type one errors by conducting too many statistical tests or of making type two errors by correcting the significance levels and reducing the power, statistical tests were exclusively performed for these two variables. They were chosen on the basis of research findings that indicate the strong influence of EFL teachers' sense of personal teaching efficacy on CLL use and good alpha reliabilities of this scale on all three measures, as well as implications of the *TpB* (see Chap. 3.2). In line with the *TpB* (Ajzen, 2006b) interventions designed to foster CLL use can be directed at one or more of its determinants. Changes in one or more of these factors should lead to behavioral intentions to use CLL more often, and, under appropriate circumstances, the higher use of CLL. Therefore, a statistical test of one of the determining variables is sufficient to explain a higher use of CLL.

Quantitative data on *EFL teachers' intentions to use CLL in the EFL classroom* **(H 1.2)** was analyzed using descriptive and inferential statistics. Median scores were determined for individual developments. In order to find out if the treatment group teachers had significantly stronger intentions to use CLL in the EFL classroom from the pretest to the posttest and follow-up test than the comparison group teachers an exact Wilcoxon rank-sum test was computed. For this test, the individual teachers' median scores from the pretest were subtracted from the individual median scores from the posttest and follow-up test (median(post,follow-up) − pre). Effect sizes were computed using Spearman rank correlations between changes of EFL teachers' intentions to use CLL (i.e., differences between measures pre and post, pre and follow-up, pre and the mean of post and follow-up) and belonging to the treatment group.

Individual responses (N = 16) indicated stronger increases in intentions to use CLL of the treatment group teachers from the pretest to the posttest and follow-up test measure than of the comparison group teachers. Five treatment group teachers (*T3*, *T4*, *T5*, *T6,* and *T8*) reported strong intentions to use CLL on the pretest and very strong intentions on the posttest. Two treatment group teachers (*T3*, *T7*) indicated very strong intentions to

use CLL on the follow-up test. None of the comparison group teachers indicated an increase in intention to use CLL from the pretest to the posttest and follow-up test. Their intentions to use CLL were predominantly strong or moderate on all three measures (see App. B4). The results of the exact Wilcoxon rank-sum test showed a statistically significant difference in favor of the treatment group with W=55, p< .005361 (with p < .05). The effect sizes were r_s = 0.47 (pretest and posttest), r_s = 0.55 (pretest and follow-up test), and r_s = 0.59 (pretest and mean of posttest and follow-up test).

Quantitative data on *EFL teachers' attitudes toward CLL use in the EFL classroom* **(H 1.3)** was analyzed using descriptive statistics. No statistical test was performed to reduce the chance of inflation of type-one errors by conducting too many statistical tests, or of making type two-errors by correcting the significance levels and reducing the power. Because of the small sample size, descriptive analyses were performed for each individual teacher and the two groups on all measures. The analysis of individual data involved calculation of median scores. For the analysis of the group data, median scores and ranges were generated.

Individual responses (N = 18) showed positive and very positive attitudes toward CLL use among the treatment and comparison group teachers from the pretest to the follow-up test (see App. B4). Descriptive analyses at the group level indicated equal attitudes among the treatment and the comparison group teachers on the pretest and the posttest, and lower attitudes of the comparison group on the follow-up test (Fig. 7). Median scores of the treatment group were consistent from the pretest to the follow-up test (pre: *Mdn* = 4.00, *R* = 2 (min = 3; max = 5); post: *Mdn* = 4.00, *R* = 2 (min = 3; max = 5); follow-up: *Mdn* = 4.00; *R* = 2 (min = 3; max = 5). Median scores of the comparison group decreased on the follow-up test (pre: *Mdn* = 4.00, *R* = 2 (min = 3; max = 5); post: *Mdn* = 4.00, *R* = 2 (min = 3; max = 5); follow-up: *Mdn* = 3.25, *R* = 2 (min = 3; max = 5).

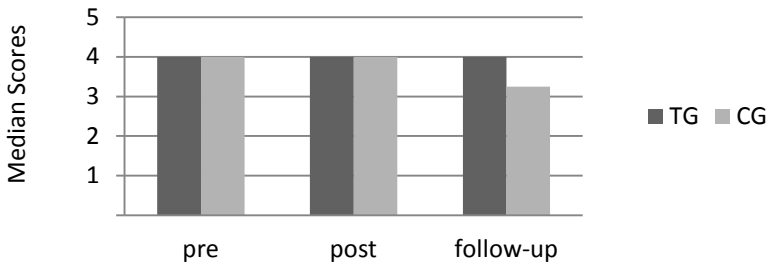

Figure 7: EFL Teachers' Attitudes toward CLL Use

Note: EFL teachers' attitudes toward CLL use in the EFL classroom were examined with eleven items on a five-point scale. A median score of 4.5 or higher indicates 'very positive attitudes', 4 and 3.5 'positive attitudes', 3 'neither positive nor negative attitudes', 2.5 and 2 'negative attitudes' and 1.5 or less 'very negative attitudes' toward CLL use in the EFL classroom.

Quantitative data on *EFL teachers' perceived subjective norms toward CLL use in the EFL classroom* **(H 1.4)** was analyzed using descriptive statistics. No statistical test was performed to reduce the chance of inflation of type-one errors by conducting too many statistical tests, or of making type two-errors by correcting the significance levels and reducing the power. Descriptive analyses were performed for each individual teacher and the two groups on all measures because of the small sample size. The analysis of individual data involved the calculation of median scores. For the analysis of the group data, median scores and ranges were generated.

Individual responses (N = 18) of one treatment group teacher indicated that she perceived very little social pressure on the pretest and posttest, while responses of another treatment group teacher displayed very high social pressure on all three measures. One comparison group teacher reported no social pressure on the posttest (see App. B4). Descriptive analyses at the group level showed that the treatment group EFL teachers had generally higher scores on the three measures than the comparison group teachers (Fig. 8). The median scores of the treatment group teachers increased from the pretest (*Mdn* =3.50, R = 2 (min = 3; max = 5) to the posttest (*Mdn* =4.00, R = 3 (min = 2; max = 5) and decreased on the follow-up test (*Mdn* =3.75, R = 2 (min = 3; max = 5). The scores of the comparison group decreased from the pretest (*Mdn* =3.25, R = 1 (min = 3; max = 4) to the posttest (*Mdn* =3.00, R = 3 (min = 1; max = 4) and remained consistent on the follow-up test (*Mdn* =3.00, R = 1 (min = 3; max = 4).

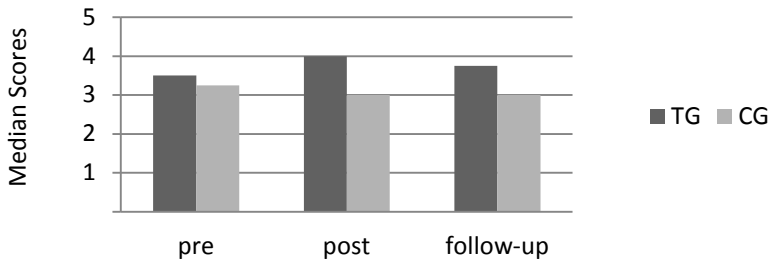

Figure 8: EFL Teachers' Subjective Norms toward CLL Use

Note: EFL teachers' perceived subjective norms toward CLL use in the EFL classroom were examined with eight items on a five-point scale. A median score of 4.5 or higher indicates 'very high social pressure', 4 and 3.5 'social pressure', 3 'neither pressure nor no pressure', 2.5 and 2 'rather no social pressure', and 1.5 or less 'no social pressure' to use CLL in the EFL classroom.

Quantitative data on *EFL teachers' sense of general teaching efficacy* **(H 1.5)** was analyzed using descriptive statistics. No statistical test was performed to reduce the chance of inflation of type-one errors by conducting too many statistical tests, or of making type two-errors by correcting the significance levels and reducing the power. Due to the small sample size, descriptive analyses were performed for each individual teacher and the two groups on all measures. The analysis of individual data involved the calculation of median scores. For the analysis of the group data, median scores and ranges were generated.

Individual responses indicated a very high and a high increase in two treatment group EFL teachers' sense of general teaching efficacy from the pretest to the follow-up test. Individual responses showed a high decrease in the sense of general teaching efficacy of one comparison group EFL teacher (see App. B4). Descriptive analyses at the group level showed that the treatment group teachers had higher scores on the posttest and the follow-up test than the comparison group teachers (see Fig. 9). Median scores of the treatment group increased from the pretest (*Mdn* = 2.50, *R* = 3 (min = 1; max = 4) to the posttest (*Mdn* = 3.00, *R* = 3 (min = 2; max = 5) and were consistent on the follow-up test (*Mdn* = 3.00, *R* = 2 (min = 3; max = 5). Median scores of the comparison group decreased from the pretest (*Mdn* = 2.75, *R* = 2 (min = 2; max = 4) to the posttest (*Mdn* = 2.50, *R* = 2 (min = 1; max = 3) and were consistent on the follow-up test (*Mdn* = 2.50, *R* = 2 (min = 2; max = 4).

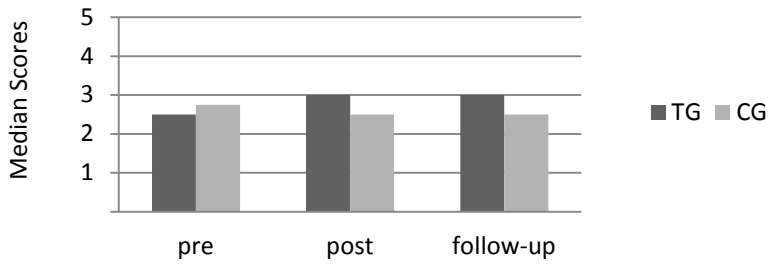

Figure 9: EFL Teachers' Sense of General Teaching Efficacy

Note: EFL teachers' sense of general teaching efficacy was examined with ten items on a five-point scale. A median score of 4.5 or higher indicates a 'very high sense of general teaching efficacy', 4 and 3.5 a 'high sense of general teaching efficacy', 3 'neither a high nor a low sense of general teaching efficacy', 2.5 and 2 a 'rather low sense of general teaching efficacy', and 1.5 or less a 'low sense of general teaching efficacy'.

Quantitative data on *EFL teachers' sense of personal teaching efficacy* (**H 1.6**) was analyzed using descriptive and inferential statistics. Median scores were computed for individual developments. An exact Wilcoxon rank-sum test (N = 18) was computed to find out if the treatment group teachers developed a significantly higher sense of personal teaching efficacy from the pretest to the posttest and follow-up test than the comparison group teachers. For this test, the individual teachers' median scores from the pretest were subtracted from the individual median scores from the posttest and follow-up test (median(post,follow-up) − pre). Effect sizes were computed using Spearman rank correlations between changes of EFL teachers' sense of personal teaching efficacy (i.e., differences between measures pre and post, pre and follow-up, pre and the mean of post and follow-up) and belonging to the treatment group.

Individual responses indicated more and stronger increases in the sense of personal teaching efficacy of the treatment group teachers from the pretest to the posttest and follow-up test measure than of the comparison group teachers. Seven treatment group teachers reported an increase in their sense of personal teaching efficacy from the pretest to the posttest (*T1*, *T3, T4*, *T5*, *T6*, *T9,* and *T10*). None of the comparison group teachers indicated an increase of their sense of personal teaching efficacy on these measures. Moreover, two comparison group teachers reported a decrease from the pretest to the posttest measure (*T12* and *T18)*. From the pretest to the follow-up test measure four treatment group teachers (*T1*, *T3, T4*, and *T8*) and two comparison group teachers (*T12* and *T19)* reported an increase of their sense of personal teaching efficacy.

A moderate sense of personal teaching efficacy was indicated by three treatment group teachers (*T2, T7,* and *T9)* and three comparison group teachers (*T15, T16* and *T17)* on all three measures (see App. B4). The results of the exact Wilcoxon rank-sum test (*N* = 18) showed a statistically significant difference in favor of the treatment group, with *W*=57.5, *p*< .01625 (with *p* < .05). The effect sizes were r_s = 0.68 (pretest and posttest), r_s = 0.27 (pretest and follow-up test), and r_s = 0.64 (pretest and mean of posttest and follow-up test).

Qualitative data on *EFL teachers' sense of actual behavioral control* was gathered from training participants on the second follow-up test twelve months after the treatment and analyzed with the *structured content analyses method* (Mayring, 1996, 2008). On the basis of previous research (Rotering-Steinberg, 2000; Schnebel, 2003), in particular the scale used to measure *EFL teachers' sense of general teaching efficacy* (Ghaith, 2004), a coding system (see App. B4) was generated. It distinguished ten contextual conditions: 1) resources, 2) staff development opportunities, 3) testing and assessment, 4) collegial support, 5) curriculum ideas, 6) administrative support, 7) time, 8) classroom space and arrangements, 9) class sizes, and 10) student competencies. Responses were categorized with regard to facilitating and impeding factors of CLL use. The data was analyzed by the investigator and a graduate student of psychology independently and then compared for consistency. It was revised after the first application based on teacher responses. A contextual condition named *school organization* was added. The final coding system and a list of teachers' responses can be found in Appendix B4.

The treatment group EFL teachers (*N* = 9) reported factors that facilitate or impede CLL use in the EFL classroom in terms of contextual conditions. Regarding factors that facilitate CLL use in the EFL classroom, they considered collegial support (*n* = 5) and appropriate classroom space and arrangements (*n* = 4) as most helpful. Staff development opportunities (*n* = 3), administrative support (*n* = 3), time to plan CLL (*n* = 3), curriculum ideas (*n* = 2), and small class sizes (*n* = 2) were also emphasized and considered to facilitate CLL use. With regard to factors that impede CLL use in the EFL classroom, the teachers viewed factors linked with student competencies (*n* = 9) and school organization as major boundaries (*n* = 9). The EFL teachers also stated that testing and assessment requirements (*n* = 3) as well as the lack of adequate materials (*n* = 2)

impede their actual CLL use. Table 12 in Appendix B4 provides an overview of EFL teachers' perceptions of actual behavioral control to use CLL in the EFL classroom.

The **second research question (R 2)** that guided the investigation was:

What is the impact of the training on EFL teachers' use of CLL in the EFL classroom?

In the related research hypotheses **(H 2.1 to 2.5),** it was predicted that the treatment group EFL teachers would demonstrate a more effective CLL use not only with regard to the frequency of use **(H 2.1)** but also the quality of use that was assessed by means of the use of instructional principles **(H 2.3)** and German as the language of instruction **(H 2.5)**. It was also predicted that EFL students' perceptions of the frequency of CLL use **(H 2.2)** would match EFL teacher responses. Besides, it was expected that perceptions of the treatment group students on the quality of use would agree with the treatment group teacher responses **(H 2.4)**.

Quantitative data on **CLL use (R 2)** and related research hypotheses **(H 2.1** to **2.5)** were analyzed using descriptive and inferential statistics.

Quantitative data on the *frequency of EFL teachers' CLL use* (**H 2.1 and H 2.2**) was analyzed using descriptive and inferential statistics. Descriptive analyses were performed for each individual teacher and the two groups on all three measures. For individual developments, the relative frequencies based on mean scores were calculated. Group data analyses included the calculation of the relative frequencies on the basis of mean scores and standard deviations. Two two-sample permutation tests[114] were performed to determine if the CLL use of the treatment group teachers increased significantly more from the pretest to the posttest and follow-up test than the CLL use of the comparison group teachers. The first test examined teachers' ratings of CLL use from the pretest to the posttest and follow-up test (**H 2.1**). For this test, the individual teachers' mean scores from the pretest were subtracted from the individual mean scores from the posttest and follow-up test (mean(post,follow-up) − pre). To avoid bias, the second test was based on

[114] A two-sample permutation test is a non-parametric procedure that can be used instead of a parametric two-sample t-test. In contrast to the t-test, the permutation test uses the difference of means (or some other statistic) directly and estimates the sampling distribution by resampling. It can be used if the sampling distribution is not normal and the sample sizes are very small as it still provides accurate *p*-values (Good, 2005; see also Maindonald & Braun, 2010).

the same procedure but examined teacher (**H 2.1**) and student responses (**H 2.2**). Mean scores from teacher and student data were combined in the data analysis. Effect sizes were computed using Spearman rank correlations between changes of the frequency of EFL teachers' CLL use (i.e., differences between measures pre and post, pre and follow-up, pre and the mean of post and follow-up) and belonging to the treatment group. For the first test only teacher data was used. For the second test, student data was also used (i.e., the differences between pre and post and pre and follow-up) and teacher and student data was combined (i.e., the differences between pre and the mean of post and follow-up).

Individual responses of five treatment group teachers (*T3, T4, T6, T7, T8, and T9*) showed that the frequency of CLL use increased from the pretest to the posttest and decreased on the follow-up test. One teacher reported (*T6*) an increased use from the pretest to the posttest and consistent use from the posttest to the follow-up test. Two teachers (*T1, T5*) indicated a decreased use from the pretest to the posttest and an increased use on the follow-up test. *Teacher 11* reported no use on the pretest and posttest and an increased use on the follow-up test. One teacher did not indicate the frequency of CLL use on the posttest (*T2*), and one did not indicate it on the follow-up test (*T10*) (see Fig. 10).

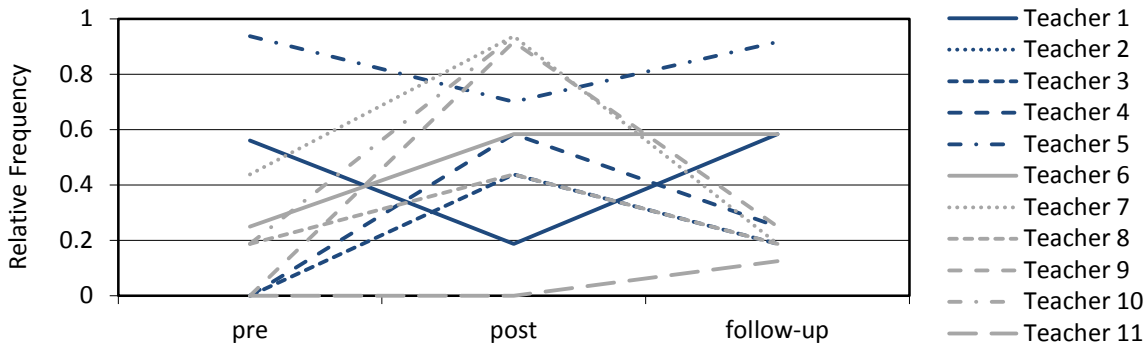

Figure 10: Frequency of CLL Use (Teacher Ratings) – Treatment Group

Note: The frequency of EFL teachers' CLL use was measured with one item on a rating scale ranging from 'not at all' to 'seven to eight times' and an open response ('other'). *Teachers 1* to *5* worked at *school 1* (i.e., a German "Hauptschule") and *Teachers 6* to *11* worked at *school 2* (i.e., a German comprehensive school).

The EFL students of six treatment group teachers (*T2, T3, T5, T7, T8, and T11*) reported an increase in CLL use from the pretest to posttest and a decrease in the follow-up test. Two groups (*T4, T6*) reported consistent use on all three measures. The EFL students of one

teacher (*T1*) reported an increased CLL use from the pretest to the follow-up test. An increase from the pretest to the posttest and stable use on the follow-up test was indicated by another group (*T9*). One learning group (*T10*) indicated an increased use from the pretest to the posttest. No data was gathered from this group on the follow-up test due to the teacher being ill (see Fig. 11).

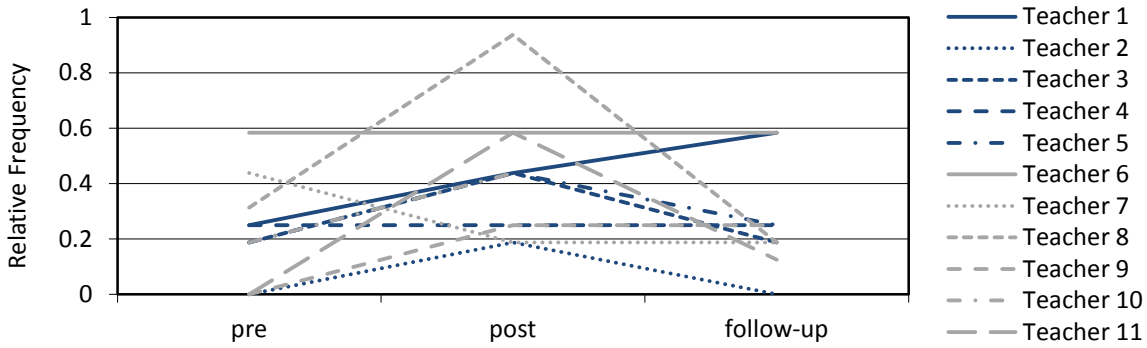

Figure 11: Frequency of CLL Use (Student Ratings) – Treatment Group

Individual responses indicated that the frequency of CLL use of three comparison group EFL teachers (*T12, T15,* and *T17*) increased from the pretest to the posttest and decreased on the follow-up test. Responses of three teachers (*T13, T16,* and *T18*) showed a decreased use from the pretest to the posttest and no use on the follow-up test. *Teacher 14* reported stable use on all three measures. Constant use from the pretest to the posttest and no use on the follow-up test were reported by *Teacher 19* (see Fig. 12).

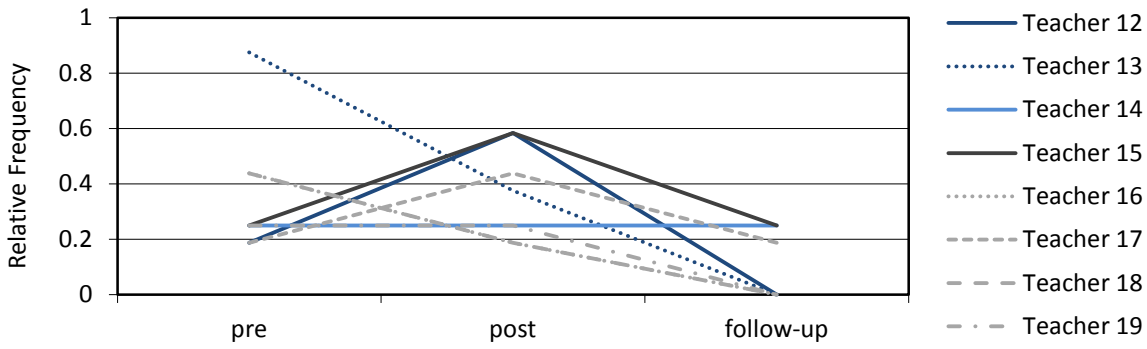

Figure 12: Frequency of CLL Use (Teacher Ratings) – Comparison Group

Note: *Teachers 12 and 13* worked at *school 1* (i.e., a German "Hauptschule"), *Teacher 14* worked at *school 3* (i.e., a German "Hauptschule"), *Teacher 15* worked at *school 4* (i.e., a German "Hauptschule"), and *Teachers 16 to 19* worked at *school 2* (i.e., a German comprehensive school).

The students of four comparison group teachers (*T13, T15, T17,* and *T18*) indicated a consistent use on all three measures. Consistent use from the pretest to the posttest and no use were reported by one group (*T19*). The students of *Teacher 16* reported a decreased use from the pretest to the posttest and an increased use on the follow-up test. Decreased use from the pretest to the posttest and consistent use on the follow-up test was reported by the students of *Teacher 14*. The students of *Teacher 12* indicated no use on all three measures (see Fig. 13).

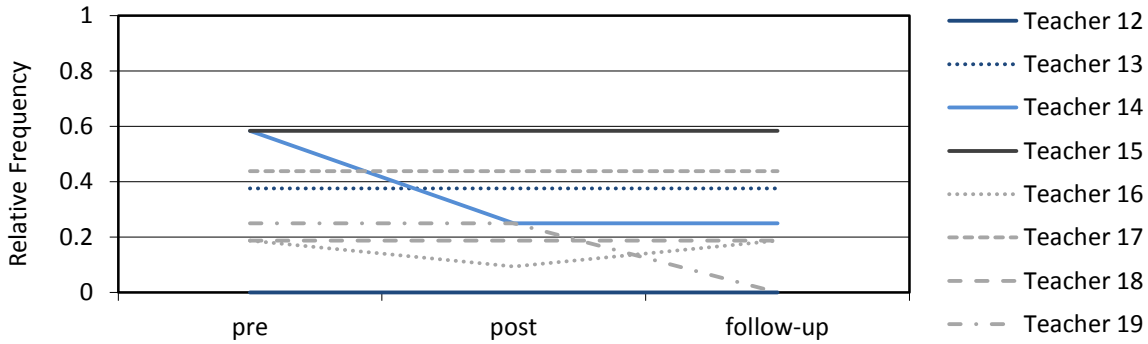

Figure 13: Frequency of CLL Use (Student Ratings) – Comparison Group

The calculation of the relative frequency of CLL use also indicated that the frequency of CLL use of the comparison group teachers on the posttest and follow-up test was lower than the frequency of CLL use indicated by the treatment group teachers. The treatment group teachers reported more CLL use from the pretest to the posttest (M_{pre} = 0.25, *SD* = 0.29; M_{post} = 0.57, *SD* = 0.32) and lower use on the follow-up test (*M* = 0.33, *SD* = 0.28). Treatment group student and teacher ratings were almost equal with student frequency ratings being slightly below the teacher ratings. Mean scores for the frequency of CLL use indicated by the treatment group students showed a higher use from the pretest to the posttest (M_{pre} = 0.22, *SD* = 0.18; M_{post} = 0.43, *SD* = 0.22) and a lower use on the follow-up test (*M* = 0.26, *SD* = 0.19). The comparison group teachers reported a consistent CLL use from the pretest to the posttest (M_{pre} = 0.36, *SD* = 0.23; M_{post} = 0.36, *SD* = 0.17) and a lower use on the follow-up test (*M* = 0.09, *SD* = 0.12). Ratings of comparison group teachers and students were almost equal with student frequency ratings being slightly below teacher ratings on the pretest and the follow-up test (M_{pre} = 0.33, *SD* = 0.21; M_{post} = 0.27, *SD* = 0.19). The comparison group students indicated a more frequent CLL use on the follow-up test than the comparison group teachers (*M* = 0.25, *SD*

= 0.21). Figure 14 illustrates the frequency of CLL use reported by the treatment group teachers and students as well as by the comparison group teachers and students.

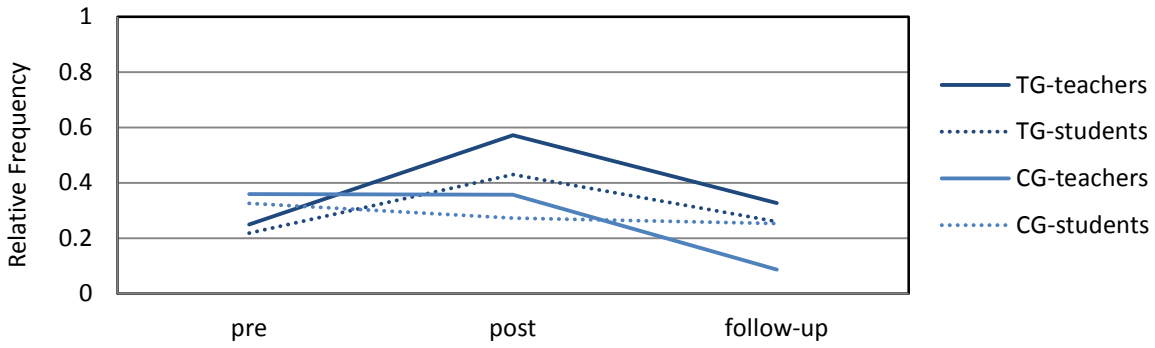

Figure 14: Frequency of CLL Use – Treatment and Comparison Group

Two two-sample permutation tests (N = 17) were conducted to examine if the treatment group teachers used CLL significantly more from the pretest to the posttest and follow-up test than the comparison group teachers. The first test was based on the relative frequency of CLL use reported by teachers, and the second on teacher and student ratings. Of the 24.310 permutations conducted in the first test, 482 mean scores were greater than 0.320. The difference between the treatment group and the comparison group was statistically significant: p = 482/24310 = 0.0198 in favor of the treatment group. The effect sizes were r_s = 0.43 (pretest and posttest), r_s = 0.57 (pretest and follow-up test), and r_s = 0.48 (pretest and mean of posttest and follow-up test). In the second test, 177 mean scores of the 24.310 permutations were greater than 0.800. The difference between the treatment group and the comparison group was statistically significant: p = 177/24310 = 0.0073 in favor of the treatment group. The effect sizes were r_s = 0.63 (pretest and posttest) and r_s = 0.37 (pretest and follow-up test) based on student responses, as well as r_s = 0.70 (pretest and mean of posttest and follow-up test) based on student and teacher data[115].

Quantitative data on the *quality of EFL teachers' CLL use* (**H 2.3** to **H 2.5**) was analyzed using descriptive statistics and inferential statistics to determine if treatment group *EFL*

[115] The effect sizes were r_s = 0.63 (pretest and posttest) and r_s = 0.63 (pretest and follow-up test) based on student and teacher responses, as well as r_s = 0.64 (pretest and mean of posttest and follow-up test) based on student data.

teachers' use of instructional principles **(H 2.3** and **H 2.4**) and their use of *German as the language of instruction* (**H 2.5**) was lower than that of the comparison group.

Descriptive analyses of *teachers' use of instructional principles* (**H 2.3** and **H 2.4**) were based on teacher and student data. They involved two steps. In the first step, the relative ratio of use of instructional principles was calculated. Appropriate use of instructional principles had been defined earlier through criteria of effective CLL use on the basis of related theory and research findings (Chap. 3.1 and 3.2). Teacher and student responses were rated with regard to meeting the criteria or not. The relative ratio of criteria that were met was computed for each teacher, group of teachers and student group. In addition, the standard deviations were calculated for each group. In a second step, the group data was analyzed by computing median scores and ranges for each item. Descriptive analyses of EFL teachers' use of *German as the language of instruction* (**H 2.5**) involved group based generation of median scores and ranges.

Inferential statistical analyses involved one two-sample permutation test. The test was performed to determine if the use of CLL principles of the treatment group teachers increased significantly more from the pretest to the posttest and follow-up test than the CLL use of the comparison group teachers (**H 2.3**). It was based on the relative ratio of use of CLL principles reported by the EFL teachers. The individual teachers' mean scores from the pretest were subtracted from the individual mean scores from the posttest and follow-up test (mean(post,follow-up) − pre). Effect sizes were computed using Spearman rank correlations between changes of EFL teachers' use of instructional principles (i.e., differences between measures pre and post, pre and follow-up, pre and the mean of post and follow-up) and belonging to the treatment group.

For *EFL teachers' use of instructional principles* (**H 2.3 and 2.4**), individual responses of four treatment group teachers (*T1, T2, T3, T5*) indicated that their use of instructional principles increased from the pretest to the posttest and follow-up test. *Teacher 4* reported an increased use from the pretest to the posttest and consistent use on the follow-up test. Three teachers (*T6, T7,* and *T8*) indicated an increase from the pretest to the posttest and a decrease on the follow-up test. *Teacher 11* reported consistent use from the pretest to the posttest and an increased use on the follow-up test. Responses of *Teacher 9* indicated a decreased use from the pretest to the posttest and an increased

use on the follow-up test. *Teacher 10* indicated a high use from the pretest to the posttest and did not indicate the use of instructional principles on the follow-up test (see Fig. 15).

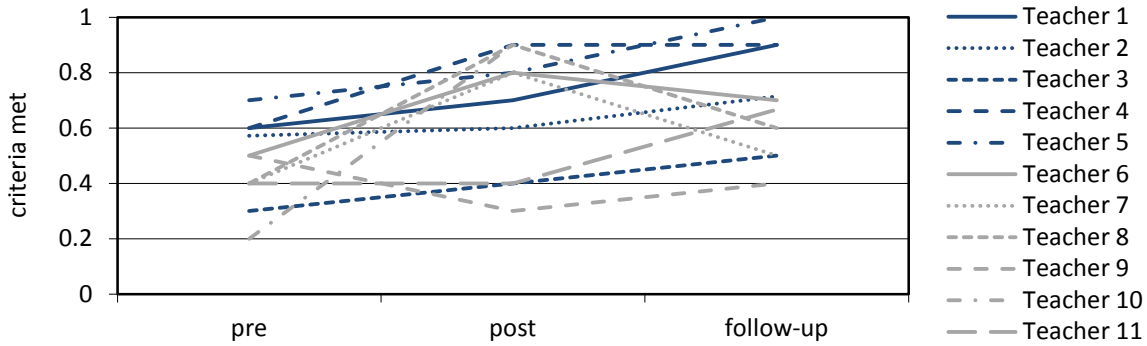

Figure 15: Use of Instructional Principles (Teacher Ratings) – Treatment Group

The EFL students of two treatment group teachers (*T1, T3*) reported an increase in CLL principles use from the pretest to the posttest and follow-up test. The students of *Teacher 6* reported an increased use from the pretest to the posttest and consistent use on the follow-up test. Four groups (*T5, T8, T9,* and *T4*) indicated an increase from the pretest to the posttest and a decrease on the follow-up test. A decrease of CLL principles use from the pretest to the posttest and an increase was indicated by two groups (*T2, T4*). The students of *Teacher 7* reported a decrease in CLL principles use from the pretest to the posttest and consistent use in the follow-up test. An increased use from the pretest to the posttest was indicated by the students of Teacher 10. This group did not report a use of CLL principles on the follow-up test (see Fig. 16).

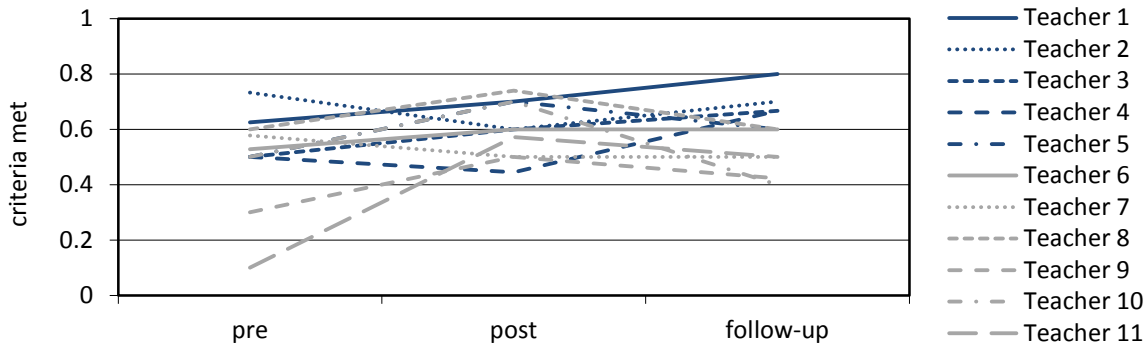

Figure 16: Use of Instructional Principles (Student Ratings) – Treatment Group

Individual responses of the comparison group teachers indicated that the use of CLL principles of four teachers (*T12, T13, T15,* and *T16*) increased from the pretest to the posttest and decreased on the follow-up test. Responses of three teachers (*T17, T18,* and *T19*) showed a decreased use from the pretest to the posttest and a consistent use on the follow-up test. *Teacher 14* reported a decrease from the pretest to the posttest and an increase to the follow-up test (see Fig. 17, see also App. B4).

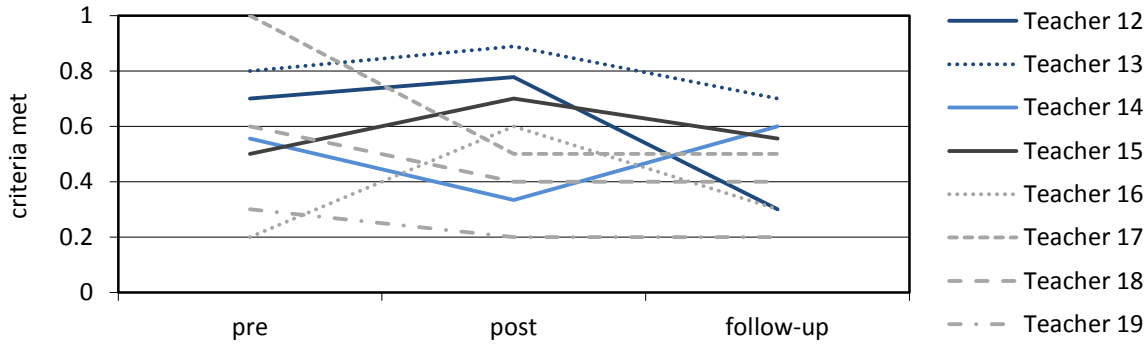

Figure 17: Use of Instructional Principles (Teacher Ratings) – Comparison Group

Overall, the treatment group teachers reported an increased use of CLL principles from the pretest (*M* = 0.47, *SD* = 0.15) to the posttest (*M* = 0.68, *SD* = 0.22) and a consistent use on the follow-up test (*M* = 0.68, *SD* = 0.20). Student and teacher ratings were almost equal with student ratings of teachers' use of instructional principles being slightly below the teacher ratings. Mean scores for the use of CLL principles reported by the EFL students increased from the pretest (*M* = 0.44, *SD* = 0.17) to the posttest (*M* = 0.60, *SD* = 0.04), and slightly decreased on the follow-up test (*M* = 0.59, *SD* = 0.12). The comparison group EFL teachers reported a decrease in CLL principles used from the pretest (*M* = 0.58,

SD = 0.26) to posttest (*M* = 0.55, *SD* = 0.23) and the follow-up test (*M* = 0.44, *SD* = 0.17). Figure 18 presents the use of instructional principles reported by the treatment group EFL teachers and students as well as by the comparison group EFL teachers.

The results of the two-sample permutation test (*N* = 18) indicated a significant difference in the use of CLL principles between the two groups from the pretest to the posttest and follow-up test in favor of the treatment group. Of the 75.582 permutations, 396 mean scores were greater than 0.262. The difference between the treatment group and the comparison group was statistically significant: p = 396/75582 = 0.0052. The effect sizes were moderate r_s = 0.43 (pretest and posttest), and strong r_s = 0.77 (pretest and follow-up test), and r_s = 0.62 (pretest and mean of posttest and follow-up test).

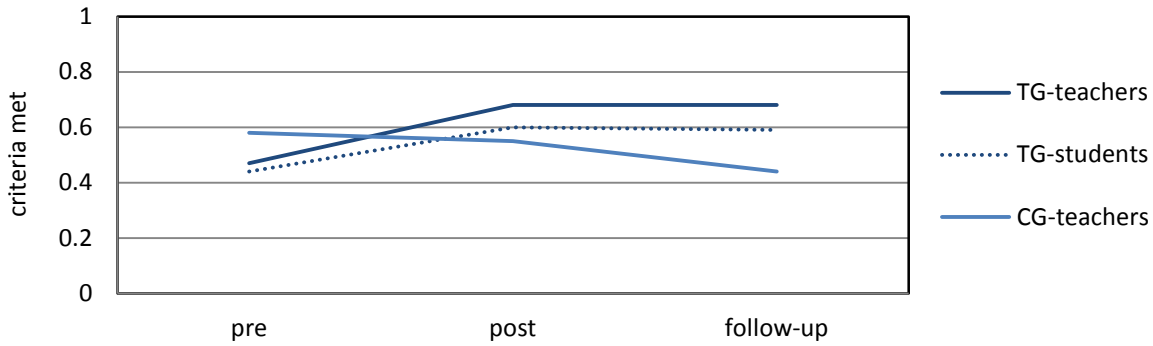

Figure 18: Use of Instructional Principles – Treatment and Comparison Group

Descriptive analyses of the EFL teachers' use of each instructional principle (*N* = 18) by determining median scores and ranges showed that the treatment group teachers used certain essential principles more often than the comparison group teachers from the pretest to the posttest and/or follow-up test. These principles included: 1) small groups of three students, 2) heterogeneous grouping, 3) positive resource interdependence, 4) positive task interdependence, 5) face-to-face promotive interaction via room arrangement, 6) face-to-face promotive interaction via cooperation, and 7) group processing.

With regard to *group size*, the treatment group teachers tended to use groups of three more often from the pretest to the posttest and follow-up test (pre: *Mdn* = 3.00, *R* = 2 (min = 2; max = 4); post: *Mdn* = 4.00, *R* = 2 (min = 3;max = 5); follow-up: *Mdn* = 4.00, *R* = 2 (min = 3;max = 5) than the comparison group teachers (pre: *Mdn* = 3.00, *R* = 3 (min =

1;max = 4); post: *Mdn* = 3.50, *R* = 3 (min = 1;max = 4); follow-up: *Mdn* = 3.00, *R* = 2 (min = 2;max = 4).

Concerning g*roup composition*, the treatment group teachers indicated they composed groups based on 'different abilities' more often from the pretest to the posttest (pre: *Mdn* = 3.00, *R* = 2 (min = 2; max = 4); post: *Mdn* = 4.00, *R* = 3 (min = 2; max = 5) than the comparison group teachers (pre: *Mdn* = 3.00, *R* = 3 (min = 1; max = 4); post: *Mdn* = 3.00, *R* = 1 (min = 3; max = 4). They also reported using 'random' assignment more often on the follow-up test (follow-up: *Mdn* = 3.50, *R* = 2 (min = 3; max = 5) than comparison group teachers (follow-up: *Mdn* = 3.00, *R* = 3 (min = 1; max = 4). The comparison teachers indicated a higher use of group composition based on 'student decisions' (pre: *Mdn* = 4.00, *R* = 2 (min = 3; max = 5); post: *Mdn* = 3.50, *R* = 1 (min = 3; max = 4); follow-up: *Mdn* = 3.50, *R* = 2 (min = 3; max = 5) than the treatment group teachers (pre: *Mdn* = 3.00, *R* = 2 (min = 3; max = 5; post: *Mdn* = 3.00, *R* = 1 (min = 3; max = 4); follow-up: *Mdn* = 3.00, *R* = 3 (min = 1; max = 4) on all three measures.

Regarding *positive resource interdependence*, the treatment group teachers indicated they handed out resource materials 'per group' more often on all three measures (pre: *Mdn* = 4.00, *R* = 3 (min = 2; max = 5); post: *Mdn* = 4.00, *R* = 3 (min = 2; ma x= 5); follow-up: *Mdn* = 4.00, *R* = 2 (min = 3; max = 5) than the comparison group teachers (pre: *Mdn* = 3.50, *R* = 1 (min = 3; max = 4); post: *Mdn* = 3.50, *R* = 2 (min = 3; max = 5); follow-up: *Mdn* = 3.00, *R* = 2 (min = 3; max = 5). They also reported handing out 'part of the group material' per student more often from the pretest to posttest (pre: *Mdn* = 3.00, *R* = 1 (min = 2; max = 3); post: *Mdn* = 4.00, *R* = 3 (min = 2; max = 5) than the comparison group teachers (pre: *Mdn* = 3.00, *R* = 3 (min = 1; max = 4); post: *Mdn* = 3.00, *R* = 4 (min = 1; max = 5).

With regard to *positive task interdependence*, the treatment group teachers stated a higher use of 'different tasks' for each group member (pre: *Mdn* = 3.00, *R* = 2 (min = 2; max = 4); post: *Mdn* = 4.00, *R* = 3 (min = 2; max = 5) and a lower use of the 'same tasks' for all members (pre: *Mdn* =4.00, *R* = 3 (min = 2; max = 5); post: *Mdn* = 2.00, *R* = 3 (min = 2; max = 5) from the pretest to the posttest than the comparison group teachers (different tasks: pre: *Mdn* = 3.00, *R* = 2 (min = 2; max = 4); post: *Mdn* = 3.50, *R* = 3 (min = 1; max = 4); same tasks: pre: *Mdn* = 3.00, *R* = 2 (min = 2; max = 4); post: *Mdn* = 4.00, *R* = 2

(min = 3; max = 5). The treatment and comparison group teachers reported a similar use of 'different tasks' (Mdn_{tg} = 3.00, R_{tg} = 2 (min = 2; max = 4); Mdn_{cg} = 3.00; R_{cg} = 1 (min = 2; max = 3) and the 'same tasks' (Mdn_{tg} = 3.00, R_{tg} = 2 (min = 2; max = 4); Mdn_{cg} = 3.00; R_{cg} = 1 (min = 3; max = 4) on the follow-up test.

Regarding *face-to-face promotive interaction* via *room arrangement*, the treatment group teachers indicated a lower use of room arrangement based on 'student decisions' from the pretest to the posttest (pre: *Mdn* = 2.00, *R* = 3 (min = 1; max = 4); post: *Mdn* = 1.00, *R* = 2 (min = 1; max = 3), and an increased use from the posttest to the follow-up-test (follow-up: *Mdn* = 2.50, *R* = 3 (min = 1; max = 4). The comparison group teachers' use of room arrangement based on 'student decisions' was higher on all three measures (pre: *Mdn* = 3.00, *R* = 4 (min = 1; max = 5); post: *Mdn* = 2.50, *R* = 4 (min = 1; max = 5); follow-up: *Mdn* = 3.00, *R* = 3 (min = 1; max = 4).

Concerning *face-to-face promotive interaction* via *student interaction* in CLL groups, the treatment group teachers reported a higher use of 'cooperation' in groups from the pretest to the posttest, and a consistent use on the follow-up test (pre: *Mdn* = 2.50, *R* = 3 (min = 1; max = 4); post: *Mdn* = 4.00, *R* = 2 (min = 2; max = 4); follow-up: *Mdn* = 4.00, *R* = 3 (min = 2; max = 5). The comparison group teachers' use of 'cooperation' in groups was higher on the pretest, equal on the posttest, and lower on the follow-up test (pre: *Mdn* = 4.00, *R* = 2 (min = 3; max = 5); post: *Mdn* = 4.00, *R* = 3 (min = 2; max = 5); follow-up: *Mdn* = 3.50, *R* = 2 (min = 3; max = 5) than the treatment group teachers' use of it.

With reference to *group processing*, the treatment group teachers reported more use of 'structured methods' from the pretest to the posttest (pre: *Mdn* = 1.00, *R* = 1 (min = 1; max = 2); post: *Mdn* = 3.00, *R* = 3 (min = 1; max = 4), and less use on the follow-up test (*Mdn* = 2.00, *R* = 1 (min = 2; max = 3). Their use was higher than comparison group teachers' use on the posttest (*Mdn* = 2.00, *R* = 2 (min = 1; max = 3). The treatment group teachers also reported a higher use of group processing as 'part of the lesson' from the pretest to the posttest and the follow-up test *(pre: Mdn* = 1.00, *R* = 2 (min = 1; max = 3); post: *Mdn* = 2.00, *R* = 3 (min = 1; max = 4); follow-up: *Mdn* = 3.00, *R* = 3 (min = 1; max = 4). The comparison group teachers' use of group processing as 'part of the lesson' was higher than the treatment group teachers' use on the pretest (*Mdn* = 1.50, *R* = 4 (min = 1; max =

5), equal on the posttest (*Mdn* = 2.00, *R* = 3 (min = 1; max = 4), and lower on the follow-up test *(Mdn* = 1.50, *R* = 2 (min = 1; max = 3).

Please see Appendix B4 for descriptive analyses of each essential principle on each time of measurement. An overview of valid and missing data for each item can also be found in Appendix B4.

The *use of German as the language instruction* (**H 2.5**) decreased among the treatment group teachers from the pretest to the posttest (pre: *Mdn* = 3.00, *R* = 1 (min = 2; max = 3); post: *Mdn* = 2.00, *R* = 2 (min = 1; max = 3) and was consistent on the follow-up test (follow-up: *Mdn* = 2.00, *R* = 2 (min = 1; max = 3). The comparison group teachers indicated a consistent use on all three measures (pre: *Mdn* = 2.00, *R* = 2 (min = 1; max = 3); post: *Mdn* = 2.00, *R* = 1 (min = 2; max = 3); follow-up: *Mdn* = 2.00, *R* = 1 (min = 2; max = 3). The treatment group teachers reported a high use of German as the language of instruction on the pretest as well as occasional use on the posttest and follow-up test. The comparison group teachers indicated occasional use on all three measures (see Fig. 19)[116].

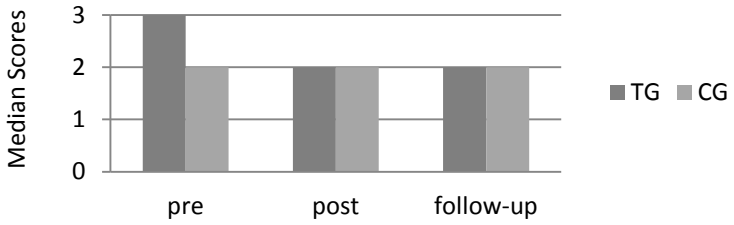

Figure 19: EFL Teachers' Use of German as the Language of Instruction – All Measures

Note: EFL teachers' use of German as the language of instruction was measured with eleven items on a four-point scale. A median score of 2.5 to 3 indicates a 'high use', 1.5 to 2 'occasional use', 1 'seldom use', and 0 'no use' of German as the language of instruction.

6.3 Evaluation of Training Quality

The **third research question (R 3)** that guided the investigation was:

What are EFL teachers' perceptions of the quality of the *Teacher Training for CLL*?

Quantitative data gathered on the *perceived quality of the CLL in-service teacher training as a whole* and the *perceived quality of each session* was analyzed using descriptive

[116] One treatment group teacher (*Teacher 10*) did not indicate her use of German as the language of instruction on the follow-up test measure.

statistics. Median scores and ranges for the items addressing the quality of the training as a whole, as well as the session contents and their perceived usefulness were determined. Additional qualitative data from open-ended items was analyzed to obtain further information on EFL teachers' perceptions of the quality of the training as a whole and each session. Selected responses reflecting teachers' perceptions are reported together with descriptive statistics.

For the *perceived quality of the CLL in-service teacher training as a whole***,** descriptive statistics showed that the training participants rated the quality of the training as very good. Median scores for the appropriateness of the training 'content' (*Mdn* = 4.00, *R* = 1 (min = 4, max = 5), the 'length' of the training sessions (*Mdn* = 4.00, *R* = 2 (min = 3; max = 5), the 'time of day' of the training sessions (*Mdn* = 4.00, *R* = 2 (min = 3; max = 5), the trainer 'lecture' (*Mdn* = 5.00, *R* = 1(min = 4; max = 5), the use of audio-visual 'media' (*Mdn* = 4.00, *R* = 2 (min = 3; max = 5), the 'experiential situations' (*Mdn* = 4.00, *R* = 1 (min = 4; max = 5), the 'usefulness' of the training (*Mdn* = 5.00, *R* = 1 (min = 4; max = 5), and the 'overall impression' (*Mdn* = 5.00, *R* = 1 (min = 4; max = 5) ranged between four and five on a five-point scale (see Fig. 20).

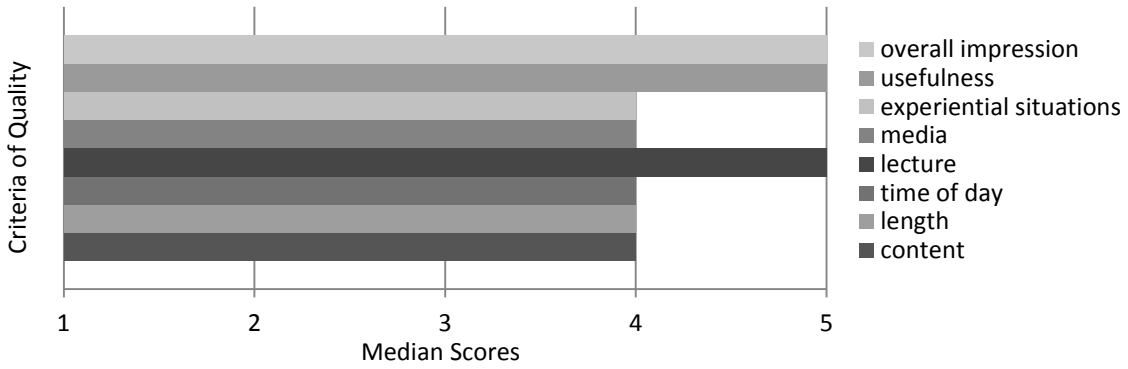

Figure 20: Perceived Quality of the Training as a Whole

Note: The perceived quality of the *Teacher Training for CLL* was measured using eight items on a five-point scale ranging from 1='very bad' to 5='very good'. A median score of 4 or higher indicates a very positive perception of the quality of the training.

Five training participants provided additional comments on the training on the posttest (see App. B4). Participants highlighted different aspects, including the atmosphere, collegial support, regular exchange of experiences, the use of English as the language of instruction, the time of the day, the content of the training, as well as the trainer's personality. With regard to the atmosphere, collegial support and regular exchange of

ideas, one teacher stated that she "*[I] particularly liked the positive atmosphere. The participants encouraged and supported each other. There was also a regular exchange of experiences*". With reference to the use of English as the language of instruction and the time of the day, another stressed that *"[…] Using the English language was not always the easiest thing. […]*". With regard to the content of the training, one teacher stated "*It was a super-informative course, a totally pleasant working atmosphere, a competent and lovely presenter. The course newly motivated me, I was filled with ideas for the next/next day(s). And I was - due to the good guidance by Ms. Meyer very successful. Thank you, […]*". Similarly, another teacher affirmed that "*above all the „fresh wind" in the classes + in the teachers' lounge convinced us*".

Concerning the *perceived quality of each session*, descriptive statistics indicated that training participants rated the quality of each session as good or very good. Median scores for the *perceived quality of training sessions* in terms of content and usefulness were high and very high, ranging between four and five on a five-point scale. High median scores were recorded for training sessions one, two, and four[117]. Very high median scores were reported for training sessions three, five, and six[118]. Figure 21 presents the median scores for the perceived quality of each training session.

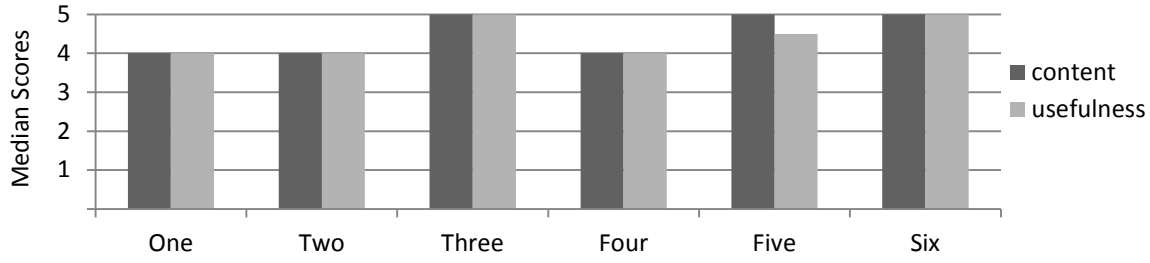

Figure 21: Perceived Quality of the Training Sessions

Note: The perceived quality of the training sessions was measured with two items on a five-point scale ranging from 1='low' to 5='high'. A median score of 4 or higher indicates high positive perceptions of the quality of the training sessions.

Some participants commented on the sessions in terms of the content and usefulness.

[117] session one: Mdn_c = 4.00, R_c = 2 (min = 3; max = 5); Mdn_u = 4.00, R_u = 2 (min = 3; max = 5); session two (Mdn_c = 4.00, R_c = 3 (min = 2; max = 5); Mdn_u = 4.00, R_u = 1 (min = 4; max = 5); session four (Mdn_c = 4.00, R_c = 2 (min = 3; max = 5); Mdn_u = 4.00, R_u = 2 (min = 3; max = 5)

[118] session three: Mdn_c = 5.00, R_c = 2 (min = 3; max = 5); Mdn_u = 5.00, R_u = 2 (min = 3; max = 5); session five: Mdn_c = 5.00, R_c = 4 (min = 1; max = 5); Mdn_u = 4.50; R_u = 3 (min = 2; max = 5); session six: Mdn_c = 5.00, R_c = 1 (min = 4; max = 5); Mdn_u = 5.00, R_u = 1 (min = 4; max = 5)

Sessions one and *two* aimed at the development of theory-based and research-based knowledge about CLL and its use, positive attitudes toward CLL and its use, perceptions of subjective norms in favor of CLL, and a high sense of general teaching efficacy. Instructional principles were derived from experiential learning, vicarious learning, and personal and technical support (see Chap. 4.2).

Regarding the content of *session one*, participants stressed the complexity of materials and simulations. For instance, one teacher pointed out that "[…] *The text was quite complex and therefore it was difficult to "learn" the single steps"*, and another affirmed that "*Learning AND implementing the method at the same time caused some information gaps […]".* With regard to its usefulness, the EFL teachers put emphasis on the importance of personal experience with CLL (e.g., *"The experience of being a group member is important."*) and the need for more information to be able to use CLL successfully in the EFL classroom (e.g., *"It's definitely a beginning. Yet, for forceful [actual] implementation I'll have to wait for more input & try-out sessions to have some material to go on."*).

Concerning the content of *session two*, four participants indicated that it was too theoretical and difficult to understand. One EFL teacher noted "v*ery theoretical English*" and another affirmed "*It was very difficult to understand*." In contrast, one teacher stated that he "*really learnt a lot and connected it to previously learnt items*". In terms of the usefulness, one teacher considered the theoretical aspects of CLL to be less important for the implementation of CLL in the EFL classroom. He indicated a willingness to learn CLL techniques (*"I'd like to practice some methods …"*).

Sessions three and *four* were targeted at the conscious application of instructional principles for effective CLL use, the design of academic and social language skills tasks as well as a high sense of general teaching efficacy. Instructional principles were derived from experiential learning, vicarious learning, and personal and technical support (see Chap. 4.2).

With reference to the content of training *session three*, three teachers highlighted the value of CLL principles and techniques presented in the session and another three stressed the positive effects of co-planning. One stated "*Good, interesting methods and ideas*", another indicated "*It helps very much to plan a lesson together and to explain it to*

the others", and "*It was very helpful, because I could plan my lesson with other colleagues and got new ideas from them*". The perceived usefulness for CLL use in the EFL classroom was high. Five teachers remarked that lesson planning with a partner was very useful (e.g., "*useful for daily work.*", or "*intensive discussion with [a] partner/talking about "practical work", enjoyed the lesson very much*"). One teacher noticed that CLL does not always require extensive preparation (*"use it without too many preparations"*).

Training participants perceived the content of *session four* to be important (e.g., "*Social skills are evident in every lesson. Without it's not possible to learn and improve.*", or "*Social skills are more important than academic."*), but difficult to implement (e.g., "*It's difficult to teach.*"). With regard to the usefulness, the EFL teachers confirmed the value of the session and the training as a whole. For instance, one teacher stated "*I'm happy to learn about the methods and really use them. It helps me a lot to have good lessons, a good atmosphere*". Another affirmed "*It's really nice to take part in this seminar and I do hope, no –I'm sure that I'll implement more + more of these skills*".

Sessions five and six focused on the development of language teachers' theory-based and research-based instructional and verbal behavior in CLL, research findings on appropriate instructional and verbal behavior, teachers' beliefs about CLL, and their sense of personal teaching efficacy. Instructional principles were derived from vicarious learning and cognitive behavior modification (see Chap. 4.2).

Regarding the content of *session five*, four EFL teachers stressed the significance of positive self-verbalizations (e.g., "*It is important to encourage oneself by thinking positive.*") and the training of instructional principles (e.g., *"teacher's role and behavior is very important […]").* Two teachers did not consider the session content to be important by stating "*Not so much new stuff, a lot of revision and reflection*", and "*I couldn't see why we talked about self-verbalization all the time.*" Concerning the usefulness, three participants attached a high value of the session to goal achievement ("*It helps to reflect about the goals you want to achieve.*"), wellbeing ("*I'll stay positive – though it sometimes is very hard/self-verbalization is so important*"), and problem solving ("*Exchange of experiences helped to form inner strategies and "topicalize" problems.*"). Two teachers remarked that they would like to spend more time on learning CLL techniques by stating:

"*I would like to be able to spend more time on the implementation of the methods.*", and "*Make implementation possible*".

In connection with the content of *session six,* four responses indicated that participants had positive perceptions, especially in terms of the role plays (e.g., "*Role play was fantastic.*"), feedback by others (e.g., "*it's good to have a look on itself [oneself] from outside e.g., other group members*"), and self-reinforcement via self-verbalizations *("a lot of positive aspects to master school (positive self-verbalizations)"*). Regarding the usefulness, three EFL teachers stressed the value of the session for problem solving (e.g., *"I found some solutions for problems in everyday situations"*). One teacher highlighted positive effects on the class climate (*"Makes a positive atmosphere/I've found out right from the beginning of the course."*), and another critically reflected on the transfer (*"something may be hard to implement on "Hauptschule"*).

7 Discussion and Conclusions

This chapter summarizes and discusses the findings of the study and presents limitations as well as implications. The first section discusses findings in the context of research questions and hypotheses. Interpretations of results are presented and conclusions drawn in comparison to previous findings are given. The second section presents limitations and implications of the study and makes recommendations for future research and practice.

7.1 Findings of the Study and Conclusions

Three research questions guided this study that addressed EFL teachers' cognitions **(R 1)**, CLL use **(R 2)**, and their perceptions of the quality of the training **(R 3)**.

The **first research question (R 1)** that guided the investigation was:

> What is the impact of the training on EFL teachers' cognitions?

In the related research hypotheses **(H 1.1 to H 1.6),** it was predicted that EFL teachers' CLL conceptions **(H 1.1)**, intentions to use CLL **(H 1.2)**, attitudes toward CLL use (**H 1.3**), perceived subjective norms toward CLL use **(H 1.4)**, as well as their sense of general **(H 1.5)** and personal teaching efficacy **(H 1.6)** would improve in the treatment group from the pretest to the posttest and follow-up test and that these changes would be greater than those of the comparison group teachers. In addition, EFL teachers' sense of actual behavioral control for CLL use was examined.

Regarding *EFL teachers' CLL conceptions* (**H 1.1**), two conceptions and related sub-conceptions emerged from qualitative data analyses on the three measures. CLL was either considered as an instructional technique or as an instructional procedure. CLL conceptions of most treatment group teachers changed over the time of the study. Findings on the three measures indicated shifts from technique-oriented and rather limited CLL conceptions to procedure-oriented and general or detailed CLL conceptions. Most of the treatment group teachers viewed CLL as an instructional procedure as defined in the training on the posttest and follow-up test, whereas the comparison group teachers continued to view it as an instructional technique linked with pair work and

group work. Statistical tests validated these findings that confirm previous research in which teachers were found not to differentiate CLL from group work before formal training and to develop new theory-based CLL conceptions after formal training (Koutselini, 2008/2009; Krol et al. 2002). Conceptual changes may result from certain training activities, especially those linked with experiential learning (i.e., CLL simulations) and cognitive reconstruction (i.e., collaborative interviewing and differentiation of appropriate and inappropriate behavior in CLL).

The findings may imply that some treatment group teachers have modified their implicit theories about CLL. In view of Brody's classification of beliefs about CLL and pedagogy (1998; see Chap. 3.2) and the coding system developed to analyze teachers' CLL conceptions in this thesis (Chap. 5.2), it may be assumed that some treatment group teachers changed their implicit theories about CLL from transmission-oriented to transaction-oriented beliefs over the time of the study. On the pretest, they tended to believe that the teacher's role was to instruct learners to work in pair work and group work settings, to provide little assistance, and that these settings foster academic learning and have a positive impact on learners' social competencies. On the second two measures, they tended to consider the teacher's role as that of a facilitator who supports learners' self-directed acquisition of academic and social competencies via structured group work with common goals. This conclusion is limited by two facts. The first one is that Brody's classification and the coding system applied in this study differed with regard to how the sense of authority was defined. The coding system developed for this study distinguished two learner-centered views. The first involved teacher instruction and the second teacher support (App. B4), while Brody also emphasized a teacher-centered view (see also Dann et al., 2002 for a similar classification). The second fact is that teacher responses generally addressed one or two but not all three sub-conceptions linked with the two CLL conceptions. There was also a tendency toward fewer (N_{pre} = 19; N_{post} = 17; $N_{follow\text{-}up}$ = 14) as well as shorter and less precise answers from the pretest to the follow-up test. These findings may indicate a reluctance to define CLL. They may also demonstrate different responses than those which structured interviews (see Hennessey & Dionigi, 2013) or observations may have provided. However, shorter and less precise

answers may also reflect more complex, elaborated and organized cognitive schema of CLL (Brody, 1998; Haag & Dann, 2001).

Concerning *EFL teachers' intentions to use CLL in the EFL classroom* (**H 1.2**), descriptive analyses at the individual level showed stronger increases of intentions to use CLL from the pretest to posttest among treatment group teachers than among comparison group teachers. Individual responses showed an increase in intentions to use CLL from the pretest to the posttest of five treatment group teachers. These teachers reported strong intentions to use CLL on the pretest and very strong intentions on the posttest. Two treatment group teachers indicated a very strong intention on the follow-up test. None of the comparison group teachers indicated an increase in intentions to use CLL from the pretest to the posttest and follow-up test. The comparison group teachers showed strong intentions on the pretest and the posttest and moderate intentions to use CLL on the follow-up test. Based on the individual responses, a statistically significant effect in favor of the treatment group was found. The effect sizes were moderate. Strong intentions of the treatment group teachers to use CLL may be due to positive CLL experiences made during the training and in the EFL classroom. Moreover, in line with the TpB (Ajzen, 2006b), changes of the treatment group teachers' sense of personal teaching efficacy may have increased their intentions to use CLL more often.

With regard to *EFL teachers' attitudes toward CLL use* (**H 1.3**), the findings showed positive attitudes toward CLL use among treatment and comparison group teachers on the pretest and the posttest. The treatment group teachers also indicated positive attitudes toward CLL use on the follow-up test. The comparison group teachers reported neither positive nor negative attitudes toward CLL use on this measure. Positive attitudes toward CLL use may result from training activities that addressed teachers' attitudes toward CLL through experiential learning, and successful CLL use in the EFL classroom. Common positive attitudes toward CLL use may also reflect current educational trends in Germany (Rotering-Steinberg, 2000; see Chap. 3.2).

Regarding *EFL teachers' perceptions of subjective norms* (**H 1.4**), the findings indicated that most of the treatment group teachers perceived positive social pressure to use CLL on all three measures while the comparison group teachers reported to not perceive social pressure (i.e., neither perceive social pressure nor perceive no social pressure).

Only *Teacher 11* reported to perceive rather no social pressure on the pretest and posttest. The treatment group teachers' perceptions of social pressure slightly increased from the pretest to the posttest, and slightly decreased on the follow-up test, but they still remained higher than before the intervention. Higher perceptions that important others would appreciate training participants' CLL use may be caused by personal and technical support provided as part of the training during the time of the study. Personal and technical support included collaboration and encouragement by colleagues through base group and collegial teaching teams, support and reduction of teaching hours on days of training by administrators, as well as trainer advice and materials for CLL use (Chap. 4.2).

As regards *EFL teachers' sense of general teaching efficacy* (**H 1.5**), the findings indicated an increase in most treatment group teachers' sense of general teaching efficacy from a rather low sense on the pretest to a neither high nor low sense on the posttest and the follow-up test. The individual responses and the high ranges on the pretest and the posttest also indicate that the sense of general teaching efficacy did not increase among all treatment group teachers. In contrast to this, the comparison group teachers' reported neither a high nor a low sense on the pretest and a rather low sense on the posttest and follow-up test. The reason for the little increase in the treatment group teachers' sense of general teaching efficacy may result from the fact that the training could only tackle some contextual factors, such as training and collegial support, but not all factors that were stressed in the questionnaire, such as room size. This assumption is also supported by findings on *EFL teachers' sense of actual behavioral control*. Training activities linked with vicarious learning (Ross, 1994, see also Chap. 3.2) may also have been incomplete or not that effective.

Concerning *EFL teachers' sense of personal teaching efficacy* (**H 1.6**), descriptive analyses at the individual level showed stronger increases in the sense of personal teaching efficacy of treatment group teachers from the pretest to the posttest and follow-up test measure than of the comparison group teachers. This is particularly true for treatment group teachers with a low or rather low sense of personal teaching efficacy on the pretest and a high or very high sense of personal teaching efficacy on the posttest and follow-up test. Based on the individual responses a statistically significant effect was found from the

pretest to the posttest and the follow-up test in favor of the treatment group with a strong effect size from the pretest to the posttest. Stronger increases in treatment group teachers' sense of personal teaching efficacy may result from training activities that addressed teachers' sense of personal teaching efficacy, in particular role plays with video-feedback (Chap. 4.2). Drawing on previous research, it can also be assumed that EFL teachers' use of CLL has enhanced their sense of personal teaching efficacy (Shachar & Shmuelevitz, 1997; see also Wax & Dutton, 1989). However, the findings showed that the effect sizes were strong from the pretest to the posttest but weak from the pretest to the follow-up test. The conclusion drawn from this is that the training had a stronger short-term effect than a long-term effect on the treatment group teachers' sense of personal teaching efficacy.

With regard to *EFL teachers' sense of actual behavioral control*, qualitative data analyses showed that collegial support and ample classroom space were viewed as major enablers of CLL use. A lack of social competencies among language learners and unhelpful organizational structures were perceived to be major limitations for CLL use. These findings show conformity with previous research that identified teachers' affiliation to collegial teaching teams (Ishler et al., 1998) and supportive organization structures (Jürgen-Lohmann et al. 2002; see also Chap. 3.2) as enablers of CLL long-term use. They also confirm that learners' lack of social and task-management skills are major limitations for CLL use (Gillies & Boyle, 2010; see also Brody, 2009). The results may indicate that training activities encouraging teacher collaboration during the training seem to be effective (Schnebel, 2003). Training activities aiming at the development of social language skills may need to be expanded in terms of conflict resolution and task-management skills (Johnson & F.P. Johnson, 2006).

The research findings on EFL teachers' cognitions (**R 1**) are based on self-reports and therefore may be biased by socially desirable responding. They cannot be generalized because of methodological limitations such as the sample size and the assignment to research conditions (see also Chap. 7.2). Generalization of the findings on *EFL teachers' attitudes toward CLL use* (**H 1.3**), *perceptions of subjective norms* (**H 1.4**), *sense of general teaching efficacy* (**H 1.5**), and their *sense of actual behavioral control* are also restricted by missing statistical tests.

Despite these limitations the research findings overall tend to support acceptance of research hypotheses **H 1.1** to **H 1.6**. This is particularly true for **H 1.1, H 1.2** and **H 1.6** since they have been statistically tested.

The **second research question (R 2)** that guided the investigation was:

What is the impact of the training on EFL teachers' use of CLL in the EFL classroom?

In the related research hypotheses **(H 2.1 to 2.5)**, it was predicted that the treatment group EFL teachers would demonstrate more frequent **(H 2.1)** and high-quality CLL use, including a higher use of essential instructional principles **(H 2.3)** and a lower use of German as the language of instruction **(H 2.5)** than the comparison group teachers. It was predicted that student perceptions of the frequency of CLL use **(H 2.2)** would match teacher responses. Besides, it was expected that perceptions of treatment group students on the quality of CLL use would match treatment group teacher responses **(H 2.4)**.

With reference to the *frequency of EFL teachers' CLL use* (**H 2.1 and H 2.2**) the findings indicated that the frequency of CLL use increased statistically significantly more from the pretest to the posttest and follow-up test among the treatment group teachers than the comparison group teachers. The effect sizes were moderate (test one) and strong (test two). Based on these findings, it may be concluded that certain training components had a positive impact on the EFL teachers' CLL use. According to previous research findings teachers' CLL use may have been increased by extensive and professional training, participants' willingness to participate (Bassett et al., 1999), the combination of formal instruction in training sessions and informal use in the EFL classroom, CLL simulations, lesson planning with colleagues, and training contents tailored to subject specific needs (Schnebel, 2003; see also Chap. 4.2). Drawing on Ajzen's *TpB* (1985, see also Chap. 3.2), changes of the EFL teachers' sense of personal teaching efficacy may also have accounted for more frequent use of CLL.

The study tried to provide objective findings on the frequency of EFL teachers' CLL use by also integrating student responses. Teacher and student ratings were almost equal, with teacher responses slightly above student responses. This indicates the objectivity of the ratings. However, the actual use of "real forms" of CLL by the comparison group teachers

remains unclear. Furthermore, participation in the training may have made the treatment group teachers sensitive to “real forms” of CLL and thus caused responses of a lower use.

The findings also showed that the training participants’ CLL use increased more from the pretest to the posttest than from the pretest to the follow-up test. Effect sizes that were computed based on student data were strong from the pretest to the posttest and weak from the pretest to the follow-up test. The conclusion drawn from this is that the training might have had a stronger short-term effect than a long-term effect on the frequency of the treatment group teachers’ CLL use.

Regarding the *quality of teachers’ CLL use* (**H 2.3 to H 2.5**), the research findings indicated that the use of essential instructional principles (**H 2.3** and **H 2.4**) increased more strongly from the pretest to the posttest and follow-up test among the treatment group than the comparison group teachers.

The statistical findings showed a significantly higher use of CLL principles of the treatment group teachers from the pretest to the posttest and follow-up test **(H 2.3)**. The effect sizes were moderate from the pretest to the posttest and strong from the pretest to the follow-up test. It may be concluded that the training had stronger long-term than short-term effects on the treatment group teachers’ use of CLL principles. Student and teacher ratings of teachers’ use of instructional principles were almost equal with teacher ratings being slightly higher than the student ratings **(H 2.4)**. This finding indicated the objectivity of the ratings.

Additional descriptive analyses showed which CLL principles were used more often by the treatment group teachers and which were used in similar quantity to the comparison group teachers.

With regard to *group size*, the treatment group teachers indicated an increased high use of groups of three from the pretest to the posttest and follow-up test.

With reference to *group composition,* they reported a higher use of different ability assignment on the posttest, and random assignment on the follow-up test. Although group composition based on student decisions was still moderately used on all three measures, the comparison group teachers’ ratings were higher.

Regarding *positive resource interdependence*, the treatment group teachers reported providing materials per group more often on all measures (i.e., a high use), and providing part of the material on the posttest and the follow-up test more often than the comparison group teachers (i.e., a high use on the posttest and a moderate use on the follow-up test).

The treatment group teachers indicated a high use of *positive task interdependence* by providing different tasks on the posttest. The use of same tasks decreased from a moderate to little use on this measure. The comparison group teachers reported a moderate use of positive task interdependence structured with different tasks on all three measures.

Individual accountability which was established by informing the students before their work in CLL groups of how their learning was to be assessed was frequently used on the posttest and moderately on the pretest and follow-up test by both groups.

Face-to-face promotive interaction through room arrangement was used in a similar manner by both the treatment and the comparison group teachers. Both groups reported a high use of close seating and paths between groups and rather little use of enough room between students on all three measures. However, the treatment group teachers indicated very little to no use of room arrangement based on student decisions on the posttest.

F*ace-to-face promotive interaction* through learner interaction was also rated in a similar way by both groups. Individual learning was moderately or less used, and competitive learning was either not used or only a little. The treatment group teachers' use of cooperation was high on the posttest and follow-up test. The comparison group teacher ratings of cooperation were high on all three measures.

Regarding *social language skills*, the treatment group teachers reported a high use of 'definition, practice, observation and feedback' on the follow-up test and a consistent moderate use on the pretest and the posttest. 'Definition, practice, and observation' was moderately used on all three measures. In addition, a moderate use of 'announcement, little feedback' on learners' use of *social language skills* by the treatment group teachers

was reported on the pretest and follow-up test. The comparison group teachers indicated a similar use of instructional principles linked with *social language skills*.

With regard to *group processing*, both groups reported moderately using 'student discussion', but also that there was occasionally no time for reflection. The treatment group teachers indicated a higher (i.e., moderate) use of 'structured methods' on the posttest than the comparison group teachers. Their ratings for 'structured methods' and group processing as 'part of the lesson' were overall higher than those of the comparison group teachers but still moderate or little.

The EFL teachers' *instructional behavior* during group work (i.e., intervening in CLL groups) of the treatment group teachers tended to decrease from a high use of frequent interventions on the pretest and posttest to a higher use of occasional interventions on the follow-up test. However, the comparison group teachers reported a similar use of interventions. Overall, the data indicated that teachers from the treatment group tended to intervene occasionally. These findings differ from findings reported by Haag et al. (2000), which showed that teachers tend to intervene too often to guide or control the group work. The teachers observed in the study by Haag et al. (2000) were not specifically trained to use group work or CLL. Therefore it may be assumed that the present training might have changed EFL teachers' behavior when intervening in groups. Findings of this study, however, do not provide detailed information on teachers' interventions, for instance regarding the time spent in groups, the necessity of intervening, or the quality of help given to students. Related training activities that may have improved the quality of teachers' instructional behavior may include experiential exercises on CLL principles, and the trainer's modeling of the use of CLL principles and of English as the language of instruction. Moreover, training activities linked with cognitive reconstruction may have supported the quality of CLL use as most training participants seemed to have procedural CLL conceptions (Johnson & Johnson, 1998; see also **H 1.1**) after the intervention.

Descriptive findings also indicated that the use of German as the language of instruction (**H 2.5**) seemed to decrease strongly (i.e., from a high to an occasional use) among the treatment group from the pretest to the posttest and follow-up test. Less use of German as the language of instruction by the treatment group teachers on the posttest and the follow-up test may rest upon the fact that the trainer modeled the appropriate use of

German and English throughout the training (see Chap. 3.2). This finding, however, needs to be considered in view of the fact that the comparison group teachers indicated occasional use of German on all three measures.

The results of this study support previous findings on the quality of teachers' CLL use after formal training where teachers were found to use essential principles more often (Krol et al., 2002; Nishinaka & Sekita, 2010). In this study, this seemed to be mainly true for the use of instructional principles linked to *group size*, *group composition*, *positive resource interdependence*, *positive task interdependence*, *face-to-face promotive interaction via room arrangement*, *face-to-face promotive interaction via student interaction* and *group processing*, but only partially true for *individual accountability* and *social language skills*. The findings also somewhat supported previous research where teachers reported using CLL, but analyses revealed that educators did not utilize all the essential instructional principles (Antil et al., 1998; Veenman et al., 2000). In this study, high ranges on some items indicated that essential instructional principles were not used by all treatment group teachers on a regular basis. In addition, group processing only seemed to be moderately used after formal training.

The higher use of certain instructional principles may result from certain training activities linked with experiential learning and teachers' CLL use inside the EFL classroom. Little or moderate use of instructional principles associated with *individual accountability*, *social language skills* and *group processing* may be caused by EFL teachers' attribution of little benefits, a lack of time, or inadequate training activities. Therefore training activities aimed at these principles may need to put more emphasis on holding learners accountable for their learning by involving them in the assessment of the learning process in order to foster academic and social language learning, and, in turn self-directed learning. The need of social language skills to function well as a group and the related instructional principles, too, need to be highlighted more.

Similarities between the treatment group and the comparison group EFL teachers' responses on the quality of CLL use may be due to the comparison group teachers' attempts to use CLL as well. Being aware of most of the essential principles via teacher resource books, teacher trainings or other teachers they may have reported or implemented some of them.

The research findings on EFL teachers' CLL use (**R 2**) are based on self-reports and therefore may be biased by socially desirable responding. They cannot be generalized because of methodological limitations such as the sample size and the assignment to research conditions (see also Chap. 7.2). Apart from these limitations the findings overall suggest the acceptance of research hypotheses **H 2.1** to **H 2.4** as the treatment group teachers tended to use CLL and the essential principles of the CLL concept presented in the training more often than the comparison group teachers. **H 2.5** needs to be negated because the treatment group teachers' use of German as language of instruction decreased from the pretest to the posttest and follow-up test, but it was not lower than that of the comparison group teachers on the posttest and follow-up test.

The **third research question (R 3)** that guided the investigation was:

What are EFL teachers' perceptions of the quality of the *Teacher Training for CLL*?

The study examined EFL teachers' perceptions of the *quality of the training as a whole* (i.e., training features and training usefulness) and *each training session* (i.e., contents and their usefulness for CLL use in the EFL classroom).

The descriptive research findings indicated positive perceptions of the training as a whole and each training session.

With regard to the *perceived quality of the training as a whole*, the findings of descriptive analyses showed that training participants perceived it to be of a high quality and very useful. The highest median scores were recorded for the overall impression and the usefulness of the training and the trainer lecture. Teachers' comments provided additional information. EFL teachers particularly highlighted the positive atmosphere and the positive effects of teacher collaboration, including encouragement and the exchange of experiences.

Regarding the *perceived quality of each training session*, the content and usefulness of session three (i.e., lesson planning for academic language objectives), session five (i.e., instructional and verbal behavior in CLL – presenting the CLL task), and six (i.e., instructional and verbal behavior in CLL – intervening and conducting group processing) gained the highest median scores. Additional comments provided further information on the EFL teachers' perceptions. The EFL teachers reported difficulty in coping with the

complexity of CLL theory presented in sessions one and two, while lesson planning with a colleague in session three was considered to be highly valuable. Lesson planning for teaching social language skills (i.e., session four) was perceived to be important but difficult to teach. Concerning sessions five and six, some training participants stressed the value of self-verbalizations and role-play situations while others asked for more opportunities to learn CLL techniques.

The research findings on EFL teachers' perceptions of the training quality (**R 3**) are based on self-reports and therefore may be biased by socially desirable responding. It can be assumed that the quality of the training was high. It may be concluded that the training contents of sessions one and two need modification to reduce the complexity.

7.2 Limitations and Implications of the Study

While the findings from this study on the whole support most research hypotheses, this information cannot be generalized. The results must be interpreted bearing in mind the following methodological limitations: the sample and time of the study, the sample size and composition, the participation in the study and the assignment to research conditions, the contents and processes of the training, the instrumentation, the research design, and the trainer effect.

The sample consisted of 19 German in-service middle and secondary school EFL teachers employed at three *"Hauptschulen"* and one *"Gesamtschule"* and 355 German EFL students attending the same schools in Lower Saxony. The study took place from September 8, 2008 until December 9, 2009. The findings may only be relevant for this sample during this time.

The study is also limited by the number of participants and the heterogeneity within and between the two groups with regard to school type, grade levels taught, gender, age, years of teaching experience, and type of employment. A larger and more homogeneous sample would have allowed more statistical tests and might have produced more statistically significant results.

The sample of this study was selected on the basis of the teachers' willingness to participate in one of the conditions. Therefore it was not randomly chosen or randomly

assigned to research conditions. The findings should thus be interpreted considering the fact that the sample was selective as it consisted of interested EFL teachers only.

The contents and processes of the training were generally based on the CLL concept of this study, and adapted training contents and processes from the *Cooperation in the Classroom-Training* by Johnson and Johnson (1998) and the *Group Training of Social Competencies* by Hinsch and Pfingsten (2007). Training contents were also adjusted to current theoretical and practical issues in EFL education at middle and secondary schools and related political guidelines in Lower Saxony. The findings should be interpreted in light of these limitations. The training might have produced other results if it had been based on another CLL concept, or applied in other German states or outside of Germany.

Most of the instruments used in the teacher and the student surveys were translated and modified from instruments originally developed and verified in the United States of America and the Lebanon. Consequently, the results are limited by the research instruments and might have caused false interpretations.

The study employed a mixed-method design to gain detailed findings concerning changes of teachers' cognitions, CLL use, and of their evaluation of the training quality. The mainly quantitative methodological orientation might have limited the results of the study. A case study design would have provided further insights into teachers' individual cognitive and behavioral changes. The relation between the EFL teachers' CLL use and indirect training outcomes such as student performance also remains unclear.

The results of the study may have also been influenced by the education and experiences of the trainer who is an elementary and middle school teacher with working experience in educational psychology and foreign language didactics, as well as a certified trainer for the *Cooperation in the classroom training.*

Despite its limitations, the study has implications for related future practice and research. The findings of the study indicate that participation in the *Teacher Training for CLL* may benefit EFL teachers' CLL use in terms of frequency and quality, as well as their sense of personal teaching efficacy.

Implications for the design of CLL teacher trainings involve training contents and processes. With regard to training contents, the findings indicate that teachers' CLL

conceptions and perceptions of personal abilities for successful CLL use need to be addressed in order to foster the frequency and quality of CLL use. Trainings may also focus on teachers' attitudes and perceived subjective norms toward CLL use, and their perceptions of external support. Teachers' perceptions of too much and too academic CLL theory may negatively affect the evaluation of training quality. In this study training participants indicated lower median scores for training sessions in which CLL theory was covered. Moreover, instructional principles linked with teaching social language skills need further specification and training, as the training participants emphasized the need to teach such social language skills but found it difficult to do this using the recommended instructional principles. Median scores for the related training session were at the same level as for CLL theory. Concerning the training processes the use of instructional principles linked with experiential learning, vicarious learning, behavior modification, cognitive behavior modification, and personal and technical support seem to be effective. In addition, more follow-up support and less organizational limitations might have further increased CLL use. The use of English as the language of instruction was sometimes perceived to be difficult and might have reduced the number of volunteers for the training. Language teachers asked to participate in the study had various reasons for not doing so. The most frequent reasons were the hours of training and organizational barriers which particularly included the time of the day for the training sessions. Informal concerns also involved the use of English in front of colleagues.

Potential areas for future research might include replications and expansions. Replications should be conducted with a larger sample size and random assignment to experimental and control conditions to achieve more robust results. Replications should also be carried out with EFL teachers who work at middle and secondary schools in other German states or abroad to examine the degree to which the impact of the training can be generalized.

Expansions of the study might clarify each research question in a separate study or address indirect training outcomes. Future research studies could do the following:

- use a case study design to examine variations in language teachers' CLL use in more detail

- modify the training contents (e.g., use in other language classrooms) and processes and evaluate the training effects
- evaluate the impact of CLL on different areas of language learning and language learner performance when CLL is used by trained and untrained language teachers
- assess training effects with cohorts of German pre-service EFL teachers
- adapt the training to EFL teaching at elementary schools and evaluate direct and indirect training outcomes

Further examinations of the areas mentioned above are of great interest due to the lack of recent studies on teacher trainings and the effectiveness of CLL use in the EFL classroom. Recent studies highlight the necessity of further teacher training programs which stress not only the differences between the various CLL methods (Sharan, 2010) but also teachers' instructional behavior, including off-task behavior, group composition, task design, teaching and reflection of social skills, and assessment of student performance (Gillies & Boyle, 2010). Areas of interest also include studies that examine both the impact of learners' and teachers' socio-cultural backgrounds (Oortwijn et al., 2008) on CLL use (Duxbury & Tsai, 2010), and the acquisition of *ICC* (see Chap. 2.3) via CLL (Stengel, 2007). If interested to further increase the frequency and quality of language teachers' CLL use and accordingly, the quality of language instruction, changes in the *Teacher Training for CLL* should address in more detail the differences between CLL methods, teachers' instructional and verbal behavior in CLL, learners' and teachers' socio-cultural backgrounds, and learners' acquisition of *ICC* as well as the related competencies.

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9 List of Figures

10 List of Tables

11 Appendices

Appendix A: Additional Information on CLL, the Teacher Training for CLL, and the Study

Table 9 presents the nine types of positive interdependence.

Table 9: Types of Positive Interdependence

Type	Principles to ensure Positive Interdependence
Positive **goal** interdependence	• a clear group goal or task • all students master the material • all students improve • one group product that all contributed to and can explain
Positive **reward** interdependence	• celebration of group success • bonus points
Positive **resource** interdependence	• limited resources (e.g., one pen per group) • part of the material (e.g., one paragraph of a text per student)
Positive **role** interdependence	• assignment of roles (e.g., Reader, Recorder)
Positive **identity** interdependence	• group identity (e.g., name or song)
Environmental interdependence	• designated classroom space
Positive **fantasy** interdependence	• collaboration in a hypothetical situation
Positive **task** interdependence	• division of labor (e.g., student *A* reads a text, students *B* writes down main ideas, students *C* checks for spelling mistakes)
Positive **outside enemy** interdependence	• hypothetical competition with other class

(adapted from Johnson et al., 1998)

Table 10 presents the five basic elements of CLL.

Table 10: The Five Basic Elements of CLL

Instructional Principle	Language Learning Principle
Positive interdependence: structuring mutual goals by implementing at least three types of positive interdependence	• exposure to and production of various language forms and functions in a natural setting • negotiation of meaning to assure mutual understanding
Individual accountability: - structuring tasks that require every student to participate and evaluating individual student's contributions	• production of output related to communication needs
Face-to-face promotive interaction: - seating students in a way that fosters proximity	• practice of verbal and non-verbal language forms
Social language skills: - teaching a social language skill directly and conducting various CLL activities to practice the skill and evaluate its use	• simultaneous acquisition of language functions and social competencies in real-life situations
Group processing: - evaluating task and group work to improve academic and social performance	• connection of new with old information • practice of self-regulated learning

(similar in Johnson and Johnson (1999) and Kagan and McGroarty (1993)

Table 11 presents the homework assignments of the *Teacher Training for CLL*.

Table 11: Homework Assignments of the Teacher Training for CLL

Session	Session Topic	"Homework"
One	Introduction to CLL I: Practice	• use of *Think-Pair-Share* or *Reading Comprehension Triads* • reading of additional texts in the handout
Two	Introduction to CLL II: Theory and research	• use of *Placemat* • presentation of a rationale statement for CLL use to another person • reading of additional texts in the handout
Three	Lesson Planning I: Academic language skills	• use of *Pairs Check* and *Gallery Walk* • reading of additional texts in the handout
Four	Lesson Planning II: Social language skills, group monitoring, and group processing	• use of Inside-Outside Circle or another CLL technique learned in the training • teaching a social language skills lesson • structured observation of students • conducting group processing • reading of additional texts in the handout
Five	Instructional behavior in CLL I: Presentation of the task	• use of the conceptual framework (i.e., implementation of the five basic elements) • use of appropriate instructional and verbal behavior for presenting a task • formulation of three positive self-verbalizations
Six	Instructional behavior in CLL II: Intervening and conducting group processing	• use of the conceptual framework (i.e., implementation of the five basic elements) • use of appropriate instructional behavior for intervening in CLL groups and conducting group processing

Table 12 provides an overview of the CLL techniques used in the *Teacher Training for CLL*.

Table 12: Overview of CLL Techniques used in the Teacher Training for CLL

Name	Brief Description
Think-Pair-Share	The teacher presents a problem to discuss. Students work individually and try to find a solution (and may take notes). Next, they form pairs and discuss their answers. Finally, the ideas are shared with the whole class.
Inside-Outside Circle	Students form two circles: an inner and an outer circle. The task is to discuss a problem presented by the teacher with another student. After discussing the topic for a few minutes, the teacher asks the students to find another partner (e.g., "The outer circle moves two partners to the right.")
Gallery Walk	The group products are posted in the classroom. The task is to present and discuss each group's results. The students walk from station to station and read and discuss the results. Then they provide positive feedback to each other.
Pairs Check	The teacher assigns students to groups of four. Students form pairs within these groups. The task is to solve a list of problems. Within pairs, students alternate – one solves the problem while the other coaches (corrects and praises). After every second problem, the two pairs that form a group compare their answers.
Placemat	The teacher assigns students to groups of three or four. Students work individually on a topic and write their ideas in one corner of the placemat. Next, they discuss their ideas. Finally, they come up with the group's answer and write it in the center of the placemat.
Jigsaw[119]	Students are randomly assigned to heterogeneous groups of three. The task is to master a certain topic which is divided into corresponding subtopics. Each group member becomes an "expert" on one topic by working with members from other groups assigned the same subtopics. After returning to their groups, each student teaches his/her area of expertise. Finally, the students individually take a test that covers the whole topic.
Reading Comprehension Triads	The teacher randomly assigns students to heterogeneous groups. The task is to read the material together and to answer questions. To do so, they are assigned mutual roles: student A is the Reader, B the Recorder and C the Checker. They must come up with three possible answers to each question and circle their favorite one. When finished, each student signs the worksheet to confirm that all of them understand and agree with the answers.

[119] See also Aronson, Blaney, Stephan, Sikes, & Snapp (1978) for a description of the *Jigsaw* method.

Table 13 presents the tasks of the *Teacher Training for CLL* in sessions one to four.

Table 13: Tasks of the Teacher Training for CLL (Session I to IV)

Session	Topic	Content	CLL Techniques
One	Introduction to CLL I: Practice	Attitudes toward CLL and its use	Think-Pair-Share
		Five basic elements of CLL (i.e., differences between group work and CLL)	Reading Comprehension Triads
Two	Introduction to CLL II: Theory and research	CLL research (i.e., CLL effectiveness)	Placemat
		CLL theory	Jigsaw
Three	Lesson Planning I: Academic language skills	Correcting wrong sentences, use of instructional principles	Pairs Check
		Planning an academic skills lesson, presentation of academic language skills lesson plans	Gallery Walk
Four	Lesson Planning II: Social language skills, group monitoring, and group processing	Skills needed to work effectively in CLL groups	Inside-Outside-Circle
		Planning a social language skills lesson, presentation of social language skills lesson plans	Gallery Walk
		Describing or judging (i.e., group monitoring)	Pairs Check
		Planning group monitoring, presentation of group monitoring lesson plans	Gallery Walk
		Group processing	Base Groups

Table 14 provides an overview of the *Teacher Training for CLL*.

Table 14: Overview of the Teacher Training for CLL

Session	Topic	Content
Awareness session(s)		
Pre-Session	CLL and organizational support	Overview of CLL, overview of training sessions, and organizational support
One	Introduction to CLL I: Practice	• The five basic elements(i.e., differences between traditional group work and CLL) • *Think-Pair-Share* and *Reading Comprehension Triads*
Implementation in the EFL classroom (see also "Homework")		
Two	Introduction to CLL II: Theory and research	• The CLL approach • *Placemat* and *Jigsaw*
Implementation in the EFL classroom (see also "Homework")		
Three	Lesson planning I: Academic language skills	• Developing academic language skills • *Pairs Check* and *Gallery Walk*
Implementation in the EFL classroom (see also "Homework")		
Four	Lesson planning II: (1) Social language skills, (2) Group monitoring, and (3) Group processing	• Developing social language skills, monitoring groups, and conducting group processing • *Inside-Outside-Circle*, *Gallery Walk* and *Pairs Check*
Implementation in the EFL classroom (see also "Homework")		
Five	Conducting a CLL lesson I: Presenting the task	• Model of the origin of behavior, appropriate instructional and verbal behavior during a CLL lesson, presenting a task • *Pairs Check* and role plays
Implementation in the EFL classroom (see also "Homework")		
Six	Conducting a CLL lesson II: (1) Intervening and (2) group processing	• Intervening during CLL activities and structuring group processing • role plays
Implementation in the EFL Classroom (see also "Homework")		
Follow-up-support sessions		

Table 15 presents the reliability of research instruments.

Table 15: Reliability of Research Instruments

Variable	Item/scale (reference)	Previous research	Present study (Cronbach's α)		
			pre	Post	follow-up
Cognitions	CLL conception (taken from Schnebel, 2003)	one single item	one single item		
	Intention to use CLL (based on Ajzen, 2006a)	one single item	one single item		
	Attitude toward CLL use (taken from Ghaith, 2004)	.73	.53	.81	.87
	Subjective norm (taken from Ghaith, 2004)	.68	.32	.63	.74
	General teaching efficacy (taken from Ghaith, 2004)	.78	.82	.73	.63
	Personal teaching efficacy (taken from Ghaith, 2004)	.78	.80	.83	.83
CLL use	Actual behavioral control (taken from Schnebel, 2003)	two single items	two single items		
	Frequency of CLL use (based on Ajzen, 2006a)	one single item	one single item		
	CLL principles (taken from Johnson & Johnson, unpublished)	ten single items	ten single items		
	German as the language of instruction (taken from Helmke et al., 2008)	.89[120]	.83	.87	.83
Evaluation of the *Teacher Training for CLL*	Training as a whole (taken from Johnson & Johnson, unpublished)	eight single items	eight single items		
	Training sessions (adapted from Johnson & Johnson, unpublished)	four single items	four single items		

[120] Cronbach's α is based on the scale of the student questionnaire.

Appendix B: Data CD

B1: Training Manual

B2: Training Presentation (i.e., PowerPoint Slides)

B3: Survey Instruments

- **EFL Teacher Survey Instruments**
- **EFL Learner Survey Instruments**

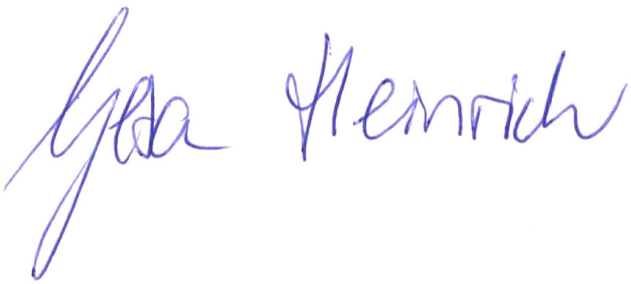
B4: Details from Data Analyses

- **Analyses of Teachers' and Students' Quantitative Data**
- **Analyses of EFL Teachers' CLL Conceptions**
- **Analyses of EFL Teachers' Cognitions**
- **Analyses of EFL Teachers' Sense of Actual Behavioral Control**
- **Analyses of EFL Teachers' Use of CLL Principles**
- **Analyses of EFL Teachers' Perceptions of the Training Quality**

Declaration

I hereby declare that the present doctoral thesis is entirely my own work and was written without assistance from external parties and without the use of other resources than those indicated. I have duly acknowledged all the sources of information which have been used in this thesis. I further declare that this thesis has not been previously submitted for any degree at any university.

Braunschweig, March 24, 2014



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Teacher Training for Cooperative Language Learning

Training Manual

Appendix B1

Table of Contents

1 Overview of the Training

Training Description

Cooperative Language Learning (CLL) can be defined as a method toward language learning and teaching that maximizes the use of pair work and small group work to achieve common learning goals through cooperation. Classroom interactions are carefully structured and evaluated to foster students' academic, social, and intercultural learning.

The training teaches participants how to use cooperative language learning in the English as a Foreign Language (EFL) classroom at middle and secondary schools (grades 5-10/11-12). Participants will be involved in exercises, discussions, and model lessons to obtain experience with cooperative language learning. The content and procedures, as well as the skills needed to use cooperative language learning in the EFL classroom are emphasized.

Training Objectives

Participants will become acquainted with:

- the theory and research on cooperative language learning
- the five basic elements of cooperative language learning
- the differences between cooperative language learning and traditional group work
- ways to observe students
- ways to assess what students have learned

Participants will learn to:

- plan lessons that foster academic and social competencies
- present tasks and cooperative language learning procedures
- teach social language skills
- observe cooperative language learning groups
- intervene in cooperative language learning groups
- guide group processing

Training Requirements

- Attend all six training sessions.
- Be actively involved in the activities and discussions.
- Do all between-session implementation assignments.
- Meet weekly with a colleague to share ideas, plan lessons, and solve problems.

Overview of the Training Sessions

- Session One: Cooperative Language Learning I
- Session Two: Cooperative Language Learning II
- Session Three: Lesson Planning I
- Session Four: Lesson Planning II
- Session Five: Conducting a CLL Lesson I
- Session Six: Conducting a CLL Lesson II

2 Session One: Introduction to Cooperative Language Learning I

Session Objectives

Participants will become acquainted with:

- the differences between traditional group work and CLL
- the five basic elements of CLL
- Think-Pair-Share and Reading Comprehension Triads
- base groups

Overview of the Session

Section	**Content**	**Instructional Technique**
(1) Welcome	Overview of the training	Direct Instruction
(2) Pretest	Survey	Direct Instruction
(3) Introduction to training	Overview of the content and structure of the training	Direct Instruction
(4) Warm-up	Participants' group work experiences (positive and negative as a group member and a teacher)	Think-Pair-Share
(5) Introduction to session	Introduction to CLL	Direct Instruction
(6) Basis elements of CLL	Five basic elements of CLL and differences between "traditional" group work and cooperative language learning	Reading Comprehension Triads
(7) Base Group Meeting	Sharing what has been learned and how it will be implemented	Base Groups of three or four participants
(8) Conclusion and Closure	Summary of session content and procedures	Direct Instruction

Implementation Assignments

Implementation Assignment ("Homework") Session One
• Completion of the cooperative language learning contract • Formation of collegial teaching teams • Use of the Think-Pair-Share or the Reading Comprehension Triads techniques • Reading of additional texts

Materials

Item	Numbers needed
Handouts (training manual, page 4 -17)	one per participant
Visual presentation (slides 1 - 29)	one per trainer
Questionnaire	one per participant
Index cards and masking tape	one per participant
Similar kinds of candy with numbers from one to three for group assignment	one per participant
Texts for five basic elements simulation	one per group of three
Worksheet for five basic elements simulation	one per group of three

2.1 Warm-up: My Experiences with Team-based Methods

Task
Reflect on your experiences with team-based methods as a group member and as a teacher.

The procedure is as follows:

- Take an index card.
- Write your name in the center of the index card.
- Write a pleasant experience you have had as a group member in the upper left-hand corner.
- Write an unpleasant experience you have had as a group member in the upper right-hand corner.
- Write a pleasant experience you have had as a teacher in the lower left-hand corner.
- Write an unpleasant experience you have had as a teacher in the lower right-hand corner.
- Find a person you don't know that well. Discuss your answers.
- Find another person after the signal (i.e., after three minutes).
- After the exercise the instructor will randomly pick someone to present his or her own results or the results of a partner.

a pleasant experience (as a group member)	an unpleasant experience (as a group member)
Gesa	
a pleasant experience (as a teacher)	an unpleasant experience (as a teacher)

(adapted from Johnson, Johnson, & Holubec, 2002)

Reflection

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this method/these methods be used in the EFL classroom?

New Cooperative (Language) Learning Method(s)

- Name of the method(s):

- Description of the method(s):

- What I like about the method(s):

- What to watch out for:

2.2 Simulation: The Five Basic Elements of Cooperative Language Learning

Task
Learn the five basic elements of a well-structured cooperative language learning lesson.

For each element:

- Read the paragraph defining it.
- Summarize the definition and write down your own definition.
- Write down at least one thing the instructor did to ensure that the element was integrated into this exercise.

Cooperation: Hand in one set of answers from the three of you that everyone agrees with and everyone can explain.

To assist in doing so, each member must take one of the following roles:

Reader: He or she reads the text to the group (i.e., slowly, with expression, and by using a group-sized voice).

Recorder: He or she takes notes of the group's answers and records the final group answer.

Checker: He or she checks to ensure that group members can explain each answer and that there are no spelling errors in the manuscript.

Criteria for success: Everyone must be able to name and explain the five basic elements.

Individual Accountability: The instructor will randomly choose a member from your group to name and explain one of the five basic elements.

Expected Behavior: active participation and checking for understanding by all group members

You have **30 minutes** to complete the task.

(adapted from Johnson et al., 1998)

The Five Basic Elements of Cooperative Language Learning

For cooperative learning to function well, you explicitly have to structure five essential elements in each lesson.

Positive Interdependence

The first and most important element is positive interdependence. You must give a clear task and group goal so that students believe they "*sink or swim together."* You have successfully structured positive interdependence when group members perceive that they are linked with each other in a way that one cannot succeed unless everyone succeeds. If one fails, all fail. Group members realize, therefore, that each person's effort benefits not only him- or herself, but all other group members as well. Positive interdependence creates a commitment to other people's success as well as one's own and is the heart of cooperative learning. If there is no positive interdependence, there is no cooperation (taken from Johnson, Johnson, & Holubec, 1998, p. 1:13).

Types of Positive Interdependence:

- *Positive **goal** interdependence*

Students perceive that they can achieve their learning goals if and only if all the members of their group attain their goals. Members of a learning group have a mutual set of goals that they are all striving to accomplish.

- *Positive **celebration/reward** interdependence*

Group celebrates success. A joint reward is given for successful group work and members' efforts to achieve.

- *Positive resource interdependence*

Each member has only a portion of information, resources, or materials necessary for the task to be completed and the member's resources have to be combined in order for the group to achieve its goal.

- *Positive **role** interdependence*

Each member is assigned complementary and interconnected roles that specify responsibilities that the group needs in order to complete a joint task.

- *Positive **identity** interdependence*

The group establishes a mutual identity through a name, flag, motto, or song.

- ***Environmental** interdependence*

Group members are bound together by the physical environment in some way. An example is putting people in a specific area in which to work.

- *Positive **fantasy** interdependence*

A task is given that requires members to imagine that they are in a life or death situation and must collaborate in order to survive.

- *Positive **task** interdependence*

A division of labor is created so that the actions of one group member have to be completed if the next team member is to complete his or her responsibility.

- *Positive **outside enemy** interdependence*

Groups are placed in competition with each other. Group members then feel interdependent as they strive to beat the other groups and win the competition (taken from Johnson, Johnson, & Holubec, 1994, p. 8:5).

Individual Accountability

The second essential element of cooperative learning is individual and group accountability. The group must be accountable for achieving its goals. Each member must be accountable for contributing his or her share of work (which ensures that no one can "hitch-hike" on the work of others). The group has to be clear about its goals and be able to measure (a) its progress in achieving them and (b) the individual efforts of each of its members. Individual accountability exists when the performance of each individual student is assessed and the results are given back to the group and the individual in order to ascertain who needs more assistance, support, and encouragement in completing the assignment. The purpose of cooperative learning is to make each member a stronger individual in his or her right. Students learn together so that they can subsequently perform higher as individuals (taken from Johnson et al., 1998, p. 1:14).

Face-to-Face Promotive Interaction

The third essential component of cooperative learning is promotive interaction, preferably face-to-face. Students need to do real work together in which they promote each other's success by sharing resources and helping, supporting, encouraging, and praising each other's effort to learn. Cooperative learning groups are both an academic support system (every student has someone who is committed to helping him or her learn) and a personal support system (every student has someone who is committed to him or her as a person). There are important cognitive activities and interpersonal dynamics that can only occur when students promote each other's learning. This includes orally explaining how to solve a problem, discussing the nature of the concepts being learned, teaching one's knowledge to classmates, and connecting present with past learning. It is through promoting each other's learning face-to-face that members become personally committed to each other as well as to their mutual goals (taken from Johnson et al., 1998, p. 1:14).

Interpersonal and Small Group Skills

The fourth essential element of cooperative learning is teaching students the required interpersonal or small group skills. In cooperative learning groups students are required to learn academic subject matter (taskwork) and also to learn the interpersonal and small group skills required to function as a part of a group (teamwork). Cooperative learning is inherently more complex than competitive or individualistic learning because students have to engage simultaneously in taskwork and teamwork. Group members must know how to provide effective leadership, decision making, trust-building, conflict-management, and be motivated to use the prerequisite skills. You have to teach teamwork skills just as purposefully and precisely as you do academic skills. Since cooperation and conflict are inherently related (see Johnson & Johnson, 1991; 1992), the procedures and skills for managing conflicts constructively are especially important for the long-term success of learning groups […] (taken from Johnson et al., 1998, p. 1:14).

Group Processing

The fifth essential component of cooperative learning is group processing. Group processing exists when group members discuss how well they are achieving their goals and maintaining effective working relationships. Groups need to describe what member actions are helpful and make decisions about what behaviors to continue or change. Continuous improvement of the process of learning results from the careful analysis of how members are working together and determining how group effectiveness can be enhanced (taken from Johnson et al., 1998, p. 1:14-1:15).

Your use of cooperative learning becomes effective through disciplined action. The **five basic elements** are not just characteristics of good cooperative learning groups, they are a discipline that you have to **rigorously apply** (much like a diet has to be adhered to) to produce the conditions for effective cooperative actions (taken from Johnson et al., 1998, p. 1:15).

The Five Basic Elements

Your definition of the element	How the elemet was structured

(adapted from Johnson et al., 2002)

Reflection

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this method/these methods be used in the EFL classroom?

New Cooperative (Language) Learning Method(s)

- Name of the method(s):

- Description of the method(s):

- What I like about the method(s):

- What to watch out for:

2.3 "Homework"

Issues in Cooperative Language Learning

Noise Level

Some teachers worry that group activities will be too noisy. This noise might make it difficult for students to focus on learning and might also disrupt other classes.

Here are some things that teachers can do:

- Understand the difference between noise, on the one hand, and the beautiful sound of learning, on the other. As Robert Slavin writes, "A cooperative learning classroom should sound like a beehive, not a sports event" (Slavin, 1995, p. 142). In other words, students should sound like busy bees working together towards a common cause, not like raucous sports fan shouting abuse at the other team and the umpires.
- Teach students to speak in two different voices: a group-sized voice that can only be heard within their group, and a class-sized voice that is used when students are asked to speak to the entire class. Group-sized voices work best when students sit close together. Similarly, keep groups small, so that students can speak quietly and still be heard by groupmates. In contrast, in a larger group some members will be far from groupmates. As a result, quiet voices will not be possible.
- Use an attention signal when you need students' attention, e.g., to explain the next step in an activity or to highlight something that one group has done particularly well. One popular attention signal is for the teacher to clap and raise a hand. When students hear their teacher clap or see the teacher's hand go up, they:

    - **R**aise a hand
    - **S**top talking
    - **P**ass the signal (alert groupmates and others who have not heard or seen the
    - attention signal)
    - **A**ttention to the teacher (look at and listen to the teacher).

An acronym for this signal is RSPA. Other attention signals are bells and other devices that make sounds, such as the little rubber ducks that some people enjoy putting in their bathtub. Also, when the teacher claps, students can clap in response. When students clap, it spreads the teacher's signal, and students need to put down their pens and other materials in order to clap.

Students Learn One Another's Errors

Students are likely to make errors when they produce language output. Will these errors be contagious?

Before making suggestions about the concern that groupmates will learn their fellow students' errors, a little should be said about the role of errors in second language learning. When teachers should help students see that errors are a normal part of the process of learning a second language, just as errors also take place in first language learning.

- Sometimes, ask questions with more than one possible good answer and let students know that there isn't just one correct answer.
- Promote groups norms in which students aren't afraid to take risks, make mistakes, and ask for help.
- Give ample time for students to respond. Allow them time to think alone and discuss with their peers. This may reduce errors.
- Give students opportunities to find and repair their own errors:
    - Don't evaluate every answer. Instead, sometimes paraphrase or summarize an answer or just acknowledge it.
    - Ask follow-up questions: Why do you say that? Could you please give an example?
    - Ask follow-up questions which require students to describe the procedure they used to get their answer.
- Remember that while accuracy is the main goal of some tasks, accuracy may be less important than fluency in other tasks.
- Give students an answer key so that they can check their groupmates' work.
- Include a language-focused activity before the group task is done. This will help language learners notice the gaps in their language as well as learn from competent language speakers. Here is an outline for such an activity:
    - Give students a short transcript of a group of competent speakers discussing a topic.
    - Guide students in noticing specific language items.
    - Encourage them to discover the functions of these expressions or phrases.
    - Confirm or correct their understanding.
    - Follow this up with a short practice involving the use of the items in another task.

Using Group Activities is a Lazy Way to Teach

Some people, including some students believe that "teaching means talking" and that teachers who let students talk together are teachers who are not doing their job properly.

To overcome such misconceptions of group work, teachers can do the following:

- Explain to students, administrators, and other stakeholders in the education process why you are using group activities.
- Let people know that a massive amount of research supports the use of well-organized group activities.
- Ask people to look at all the examples in their own lives and around the world in which cooperation is important and a lack of cooperation is harmful.
- When students do cooperative learning activities, help them see gains they achieve via cooperation. For example, when one student explains to another, both the explainer and the one receiving the explanation can gain.

Students Use their First Language during Group Activities

In *Communicative Language Teaching*, we seek to give students many opportunities to engage in real communication in the target language. However, too often, students do this communicating in their first language.

- Consider that limited use of the first language can be beneficial, especially for beginners. For example, some words are very difficult for students to explain to each other in their second language. Also, to expect students to use only the language they are learning may create anxiety for some learners.
- Each student can have first language tickets a day, semester or whatever. They, then, decide together if they need to use the first language and turn in a ticket each time the first language is used. Students can discuss how many tickets they have used and why. Recognition can be given to those who use fewer tickets.
- One corner of the classroom can be designated as the place students can go temporarily to speak the first language. Alternatively, if students want to use the first language, they write, rather than speak. Writing does not disturb other groups. Plus, writing takes time, just like it requires extra time to try to speak in the second language. Maybe students will decide to use the extra time to attempt to speak in the second language.
- Students can set a goal as to the percentage of the second language to use and then evaluate whether they reached their goal. This can be done on a regular basis.
- Students can speak a mixture of first language and second language in the same sentences or speaking turn. Students use the second language when they know the necessary second language words, but they use the first language for words that they do not know in the target language. Gradually, the percentage of second language use increases.
- Praise students for second language use, rather than criticizing use of the first language.
- Provide sufficient language support. Examples include vocabulary building, model dialogs and compositions, demonstrations by the teacher, and recycling of language items, such as vocabulary, that were learned previously.
- Help students learn strategies for asking when they do not understand what groupmates have said or written, e.g., asking for repetition, examples and definitions, and strategies for explaining when a groupmate does not understand, such as giving examples and paraphrasing. These strategies make it less likely that students will switch to the first language when second language communication breaks down in their group.
- Allow students to think or write alone before speaking. This offers students time to think how to put their ideas into the second language.
- Students need to understand that the key point of the task they are doing in the CL group is not to finish the task but for all group members to improve their second language proficiency. Thus, using the first language as a shortcut to completing a task actually defeats the main purpose of the task (taken from Jacobs & Goh, 2007, pp. 35-38).

Examples of Language Support

Getting organized/Explaining the task
Ok, shall we get started?
Any suggestions on how we should start?
Let's start with …
I suggest that each of us …
…, would you please …
Could you …?
The task for this group is …
Ok, we have to look at …
There are two main things we have to do: …

Guiding the work
Right, so far we have looked at/ discussed
Let's turn to the next question …
Ok, the next point is …
Let's move on to …

Expressing opinion
I feel …
I think …
As far as I'm concerned …
It seems to me …
I believe that ….

Agreeing with another opinion
Yes, that's right.
I agree with that.
Exactly.
You've raised a good point here.
You put that very well.

Disagreeing with an opinion
I don't agree with that.
I can't see the point.
That might be true, but …
Oh, no …
That's not the point here.

Clarifying
So, you are saying that …
Can I just check that I understand you correctly? You mean that …
Did you want to say that …?
I'm not sure what you mean.

Role cards
Here are the role cards. We can put them face down, mix them up and pick one.
Ok, what role do you have?
Who's the …?

Structuring the work
First, … has to tell us/ give us information on …
Then we'll need …
After that we should look at …
We'll start with …

Defending your opinion
What I am trying to say …
Yes, but what I really mean is …
Let me repeat what I mean.

Asking for opinion
Do you think that …?
What do you think about …?
Are you sure that …?
What's your opinion on …?

Giving in
All right, then.
I think you're right.
I take that back.
Perhaps I understood that completely wrong.

Complaining
Please stop talking and concentrate.
Quit goofing off.
You're not working constructively.
Please wait your turn.
It'd be really great if you stopped making silly remarks and contribute more.

(taken from Grieser-Kindel, Henseler, & Möller, 2006, p. 13)

2.4 Base Group Meeting: Cooperative Language Learning Contract

Cooperative Language Learning Contract

Write down major aspects of what you have learned from participating in training session one. Then write down how you plan to implement each aspect. Share what you have learned and your implementation plans with your base group. Listen carefully to their major aspects and implementation plans. You may modify your own plans on the basis of what you have learned from your group mates. Volunteer one thing you can do to help each group mate with his or her implementation plans. Utilize the help group mates offer you. Sign each member's plans to seal the contract.

Major Learning	**Implementation Plans**

Date: _____

Participant's Signature: _____

Signatures of base group members: _____

_____

(taken from Johnson et al., 1998, p. 1:22)

3 Session Two: Cooperative Language Learning II

Session Objectives

Participants will become acquainted with:

- theories of language learning linked with CLL
- research findings that support CLL use in the language classroom
- theories of language education linked with CLL, including educational goals of CLL (i.e., performance standards) and tasks design for different purposes (i.e., academic language skills, social language skills, and interactional competencies)
- Placemat and Jigsaw

Overview of the Session

Section	**Content**	**Instructional Technique**
(1) Base group meeting	Review of previous session and discussion of implementation assignment (Homework)	Base Groups
(2) Warm-up	Benefits of CLL	Placemat
(3) Introduction to session	Characteristics of the CLL approach	Direct Instruction
(4) CLL Approach	Background of CLL, theory of language, theory of learning	Jigsaw Procedure
(5) Base group meeting	Sharing what has been learned and how it will be implemented	Base Groups
(6) Conclusion and closure	Summary of session content and procedures	Direct Instruction

Implementation Assignments

Implementation Assignment ("Homework") Session Two
• Presentation of the rationale statement for CLL use in the EFL classroom to another person • Use of the Placemat technique • Reading of additional texts

Materials

Item	Numbers needed
Handouts (training manual, page 20 - 33)	one per participant
Visual presentation (slides 30 - 64)	one per trainer
Placemats for groups of three and four	one per group
Texts for Jigsaw simulation	one per participant

3.1 Base Group Meeting: Data Summary Chart

Task

Complete the data summary chart. Put the names of your base group members into the first line. Assess your own behavior and put the points into the appropriate column. Ask your partners about their behavior and put their points into the appropriate column. Total your points and compute the average. Mark the points accomplished for the first session, the second session, and so on.

Data Summary Chart

	Names of Group Members				
Targeted Behaviors					
arrived in base group on time, ready to go to work					
did implementation assignment					
shared what I have learned in the training session					
did for fun and recreation					
...					
Total					

(0 Points = did not do, 1 Point = did okay, 2 Points = did extra well)

12 Points						
11 Points						
10 Points						
9 Points						
8 Points						
7 Points						
6 Points						
5 Points						
4 Points						
3 Points						
2 Points						
1 Point						
0 Points	**Session 1**	**Session 2**	**Session 3**	**Session 4**	**Session 5**	**Session 6**

(taken from Johnson et al., 2002)

Reflection

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this method/these methods be used in the EFL classroom?

New Cooperative (Language) Learning Method(s)

- Name of the method(s):

- Description of the method(s):

- What I like about the method(s):

- What to watch out for:

3.2 Warm-up: Cooperative Learning in the EFL Classroom Will Never Work

Task
Give reasons for the use of cooperative language learning in the English as a Foreign Language (EFL) classroom.

There are three steps:

- Write down your answers in your corner on the placemat (Work alone! Don't talk.).
- Discuss your answers with your group.
- Write the group's answer in the center of the placemat.

Cooperation: Hand in one set of answers from the three of you. Everyone must agree. Everyone must be able to explain the group's answers.

Criteria for success: acceptable answers to the task

Individual Accountability: One member will be randomly picked to present the group's answers.

Expected Behavior: active participation by all group members and checking for understanding

Intergroup Cooperation: When you have finished the task compare your results with those of another group and discuss.

You have **15 minutes** to complete the task.

Individuals	**5 minutes**
Cooperative Triads	**5 minutes**
Intergroup Cooperation	**5 minutes**

Reflection

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this method/these methods be used in the EFL classroom?

New Cooperative (Language) Learning Method(s)

- Name of the method(s):

- Description of the method(s):

- What I like about the method(s):

- What to watch out for:

3.3 Simulation: The Cooperative Language Learning Approach

Task
Learn the material on the Cooperative Language Learning Approach.

- What are the basic assumptions of the teaching approach?
- What is the underlying *theory of language*?
- What is the underlying *theory of learning*?

Cooperation: Ensure that all group members master the material.

Criteria for success: 95 percent mastery by all members is very good

Individual Accountability: One member will be selected randomly to present the material for the group.

Expected Behavior:

- Everyone teaches area her or his of expertise.
- Everyone learns others' areas of expertise.
- Everyone summarizes and synthesizes.

You have **45 minutes** to complete the task.

Cooperative Triads	**5 minutes**
Preparation Pairs	**15 minutes**
Practice-Sharing-Pairs	**10 minutes**
Cooperative Triads	**15 minutes**
Whole Class Discussion	**10 minutes**

Additional Instructions:

Task:

- Master the material.
- Plan how to teach the material.

Preparation:

- underlines, questions, suggestions
- Compile major ideas.
- Prepare visual aids.
- Devise specific strategies.

Presentation:

- Encourage oral rehearsal.
- Encourage elaboration and integration.
- Encourage implementation.

(adapted from Johnson et al., 2002)

The Cooperative Language Learning Approach

Background

Cooperative learning has antecedents in proposals for peer-tutoring and peer-monitoring that go back hundreds of years and longer.[1] The early twentieth century U.S. educator John Dewey is usually credited with promoting the idea of building cooperation in learning into regular classrooms on a regular and systematic basis (Rodgers, 1988).

It was more generally promoted and developed in the United States in the 1960s and 1970s as a response to the forced integration of public schools and has been substantially refined and developed since then. Educators were concerned that traditional models of classroom learning were teacher-fronted, fostered competition rather than cooperation, and favored majority students. They believed that minority students might fall behind higher-achieving students in this kind of learning environment.
Cooperative Learning in this context sought to do the following:

- raise the achievement of all students, including those who are gifted or academically handicapped
- help the teacher build positive relationships among students
- give students the experience they need for healthy social, psychological, and cognitive development
- replace the competitive organizational structure of most classrooms and schools with a team-based, high-performance organizational structure (Johnson, Johnson, & Holubec, 1994, p. 2).

In second language teaching, CL (where it is often referred to as Cooperative Language Learning – CLL) has been embraced as a way of promoting communicative interaction in the classroom and is seen as an extension of the principles of Communicative Language Teaching[2]. It is viewed as a learner-centered approach to teaching held to offer advantages over teacher-fronted classroom methods.

In language teaching its goals are:

- to provide opportunities for naturalistic second language acquisition through the use of interactive pair and group activities
- to provide teachers with a methodology to enable them to achieve this goal and one that can be applied in a variety of curriculum settings (e.g., content-based, foreign language classrooms; mainstreaming)

[1] Thousands of years ago the Talmud stated that in order to understand the Talmud, one must have a learning partner. As early as the first century, Quintillion argued that students could benefit from teaching one another. The Roman philosopher, Seneca advocated cooperative learning through such statements as “Qui Docet Discet” when you teach, you learn twice). Johann Amos Comenius (1592-1679) believed that students would benefit both by teaching and by being taught by other students. In the late 1700’s Joseph Lancaster and Andrew Bell made extensive use of cooperative learning groups in England, and the idea was brought to America when Lancastrian school was opened in New York City in 1806. Within the Common School Movement in the United States in the early 1800s there was a strong emphasis on cooperative learning (Johnson, Johnson, & Holubec, 1998, p. 3:11).

[2] Students learn how to communicate effectively in the second language, rather than learn about the language. The focus is on the communicative functions of language: how to use the language in order to carry out specific intentions, such as apologizing or persuading, and to signal the organization of ideas by using rhetorical patterns, such as classification, comparison, or sequence (Coelho, 1992, p. 38).

- to enable focused attention to particular lexical items, language structures, and communicative functions through the use of interactive tasks
- to provide opportunities for learners to develop successful learning and communication strategies
- to enhance learner motivation and reduce learner stress and to create a positive affective classroom climate.

CLL is thus an approach that crosses both mainstream education and second and foreign language teaching (Richards & Rodgers, 2001, p. 192f.).

Theory of Language

Cooperative Language Learning (CLL) is founded on some basic premises about the interactive/cooperative nature of language[3] and language learning and builds on these premises in several ways.

Premise 1 mirrors the title of a book on child language titled *Born to Talk* (Weeks, 1979). The author holds (along with many others) that "all normal children growing up in a normal environment learn to talk. We are born to talk … we may think of ourselves as having been programmed to talk … communication is generally considered to be the primary purpose of language" (Weeks, 1979, 1).

Premise 2 is that most talk/speech is organized as conversation. "Human beings spend a large part of their lives engaging in conversation and for most of them conversation is among their most significant and engrossing activities" (Richards and Schmidt, 1983, 117).

Premise 3 is that conversation operates according to a certain agreed upon set of cooperative rules or "maxims" (Grice, 1975).

Premise 4 is that one learns how these cooperative maxims are realized in one's native language through casual, everyday conversational interaction.

[3] At least **three different theoretical views of language and the nature of language proficiency** explicitly and implicitly inform current approaches and methods in language teaching.
The first, and the most traditional of the three, is the **structural view**, the view that language is a system of structurally related elements for the coding of meaning. The target of language learning is seen to be the mastery of elements of this system, which are generally defined in terms of phonological units (e.g., phonemes), grammatical units (e.g., clauses, phrases, sentences), grammatical operations (e.g., adding, shifting, joining, or transforming elements), and lexical items (e.g., function words and structure words). […]
The second view of language is the **functional view**, the view that language is a vehicle for the expression of functional meaning. […] The theory emphasizes the semantic and communicative dimension rather than merely the grammatical characteristics of language, and leads to a specification and organization of language teaching content by categories of meaning and function rather than by elements of structure and grammar. […]
The third view of language can be called the **interactional view**. It sees language as a vehicle for the realization of interpersonal relations and for the performance of social transaction between individuals. Language is seen as a tool for the creation and maintenance of social relations. […] Interactional theories focus on the patterns of moves, acts, negotiation, and interaction found in conversational exchanges. Language teaching content, according to this view, may be specified and organized by patterns of exchange and interactions or may be left unspecified, to be shaped by the inclinations of learners as interactors (Richards & Rodgers, 2001, p. 20f.).

Premise 5 is that one learns how the maxims are realized in a second language through participation in cooperatively structured interactional activities. This involves using:

> a progressive format or sequencing of strategies in the conversation class which carefully prepares students, that systematically breaks down stereotypes of classroom procedure and allows them to begin interacting democratically and independently. Through this approach, students learn step-by-step, functional interaction techniques at the same time the group spirit or trust is being built (Christi son & Bassano, 1981, xvi).

Practices that attempt to organize second language learning according to these premises, explicitly or implicitly, are jointly labeled Cooperative Language Learning (CLL). In its applications, CLL is used to support both structural and functional models as well as interactional models of language, since CLL activities may be used to focus on language form as well as to practice particular language functions (Richards & Rodgers, 2001, p. 193f.).

Theory of Learning

Cooperative learning advocates draw heavily on the theoretical work of developmental psychologist Jean Piaget (e.g. 1965) and Lev Vygotsky (e.g. 1962), both of whom stress the central role of social interaction in learning. As we have indicated, a central premise of Cooperative Language Learning (CLL) is that learners develop communicative competence in a language by conversing in socially or pedagogically structured situations. CLL advocates have proposed certain interactive structures that are considered optimal for learning the appropriate rules and practice in conversing in a new language.

CLL also seeks to develop learners' critical thinking skills, which are seen as central to learning of any sort. Some authors have even elevated critical thinking to the same level of focus as that of basic language skills of reading, writing, listening, and speaking (Kagan, 1992). One approach to integrating the teaching of critical thinking adopted by CLL advocates is called the Question Matrix (Wiederhold, 1995). Wiederhold has developed a battery of cooperative activities built on the matrix that encourages learners to ask and respond to a deeper array of alternative question types. Activities of this kind are believed to foster the development of critical thinking. (The matrix is based on the well-known Taxonomy of Educational Objectives devised by Bloom (1956), which assumes a hierarchy of learning objectives ranging from simple recall of information to forming conceptual judgments.) Kagan and other Cooperative Learning theorists have adopted this framework as an underlying learning theory for Cooperative Learning.

The word cooperative in Cooperative Learning emphasizes another important dimension of CLL: It seeks to develop classrooms that foster cooperation rather than competition in learning. Advocates of CLL in general education stress the benefits of cooperation in promoting learning:

> Cooperation is working together to accomplish shared goals. Within cooperative situations, individuals seek outcomes beneficial to themselves and all other group members. Cooperative learning is the instructional use of small groups through which students work together to maximize their own and each other's learning. It may be contrasted with competitive learning in which students work against each other to achieve an academic goal such as a grade of "A" (Johnson et al., 1994: 4).

From this perspective of second language teaching, McGroarty (1989) offers six learning advantages for ESL students in CLL classrooms:

- increased frequency and variety of second language practice through different types of interaction
- possibility for development or use of language in ways that support cognitive development and increased language skills
- opportunities to integrate language with content-based instruction
- opportunities to include a greater variety of curricular materials to stimulate language as well as concept learning
- freedom for teachers to master new professional skills, particularly those emphasizing communication
- opportunities for students to act as resources for each other, thus assuming a more active role in their learning (Richards & Rodgers, 2001, p. 194f.).

Piaget contends that each person constructs his or her own personal understanding of the world around them through a search for equilibration (i.e., a match between current schemas – background information – about the world and how it works, on the one hand, and what is experienced on the other). Piaget's ideas have been widely interpreted as supporting the creation of classroom environments in which students play active roles as they engage in real or at least realistic tasks (Slavin, 1995).

(taken from Richards & Rodgers, 2001, pp. 192-195 and modified by adding footnotes one to three)

Reflection

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this method/these methods be used in the EFL classroom?

New Cooperative (Language) Learning Method(s)

- Name of the method(s):

- Description of the method(s):

- What I like about the method(s):

- What to watch out for:

3.4 “Homework”

Why Use Group Activities for Second Language Learning

Group activities are becoming more common in second/foreign language learning, for example, in task-based language teaching. Whereas before teachers told students, “Eyes on your own paper! No talking to your neighbour!“ students are now often encouraged to interact with classmates. This change toward more group activities has a solid foundation in both general education theory as well as second language acquisition theory. Below, some of the relevant theories are briefly discussed. These are the Input Hypothesis, the Interaction Hypothesis, the Output-Hypothesis, Socio-Cultural Theory, Task-Based Language Teaching, Humanistic Education, and Critical Pedagogy.

1. Rationale for using group activities in second language instruction
a. Input Hypothesis (Krashen, 2003)

What it says:

The Input Hypothesis states that to learn a new language students need to receive large amounts of comprehensible input in that language. Comprehensible input involves students understanding what they hear and read; input being what goes into their minds via their ears and eyes. The Input Hypothesis also asserts that a low anxiety setting helps comprehensible input build students' language competence.

How it connects to group activities:

Group activities provide comprehensible input in several ways. For example, because classmates tend to be at about the same level of language proficiency, what they say and write will likely be understandable to each other. At the same time, because some students will know vocabulary and grammar that their peers do not know, input from groupmates may contain new language for students to learn. Also, peers can provide each other with input not only in language class but outside the class as well.
Additionally, groups that function well provide a low anxiety setting for students to learn. In a whole-class setting, students have to function in front of the teacher and the entire class, whereas in a group, students’ only audience is their one, two, or three group mates. Plus, they have their peers to help them, rather than having to function on their own.

b. Interaction Hypothesis (Hatch, 1987; Long, 1981)

What it says:

The Interaction Hypothesis states that by interacting with others, students can make input more comprehensible. This increased amount of comprehensible input promotes second language acquisition.

How it connects to group activities:

In groups, students have many opportunities to ask each other for help when they do not understand something that they have heard or read. For instance, students can ask for repetition („Please say that again“), clarification (“Could you please spell that“) and explanation (“What does ___ mean?“) . In contrast, in whole class setting, students are less likely to stop the entire class to ask the teacher.

c. Output Hypothesis (Swain, 2000)

What it says:

The Output Hypothesis states that to learn a second language, in addition to comprehensible input, students also need to create comprehensible output. Comprehensible output involves students speaking and writing in matter that others can understand.

How it connects to group activities:

In a typical teacher-fronted class, only one person is speaking at a time, either the teacher or the one student who the teacher has called on. However, when group activities are used, potentially, one person per group is speaking. For example, if groups of two are used, 50% of the students can be speaking at the same time. Thus, students have much more opportunity for producing comprehensible output. Furthermore, the lower anxiety atmosphere that groups may provide can help students increase their fluency, because they may be less concerned about making errors when producing output.

d. Socio-Cultural Theory (Lantolf, 2000)

What it says:

Via cooperation, learners may be able to progress faster than they could on their own, because what students can at first only do when working with others; they can later do on their own. Therefore, interaction aids learning.

How it connects to group activities:

Groups provide an interaction-rich context for learning. Furthermore, with guidance from the teacher, groups can function better. Indeed, helping groups function better is the key focus of cooperative learning [...]. For example, teachers can help groups by building a “one for all, and all for one“ cooperative spirit among group members, by encouraging everyone to play an active role in their group, by teaching collaborative skills, and by promoting the establishment of heterogeneous groups.

e. Task-based Language Teaching (Edwards & Willis, 2005)

What it says:

Learning is facilitated when students use language to perform meaningful tasks. It is best when these tasks are similar to tasks that people do in the real world, such as completing a job application or asking for directions. Tasks encourage purposeful language use, allow learners to solve problems using their own resources and encourage them to reflect on their language use.

How it connects to group activities:

Group activities are a common feature of Task-Based Language Teaching, as most real world language tasks involve interaction with others. Also, groupmates can give each other feedback on how well they did on the task, thus promoting reflection on language use.

f. Humanistic Education (Moskowitz, 1978)

What it says:

In addition to building students' knowledge and academic skills, education should also pay attention to students' emotions and attitudes.

How it connects to group activities:

Group activities provide opportunities for students to form bonds with each other as they work together to achieve shared goals. These bonds between students can lower anxiety, boost confidence, promote a positive attitude toward the second language, and encourage students to take risks as they attempt to learn a new language.

g. Critical Pedagogy (Shor, 1992)

What it says:

Education should encourage students to take part as full citizens in their school and society. In this way, education can promote democracy.

How it connects to group activities:

Group activities help to reduce students' dependence on their teachers, by encouraging students to form support networks among themselves. Within their groups, students can play a variety of leadership roles, whereas in a 100% teacher-led classroom, leadership resides almost exclusively with the teacher. Thus, group activities increase students' feeling of power and help to equalize power relations between teachers and students (taken from Jacobs & Goh, 2007, pp. 3-6).

3.5 Base Group Meeting: Cooperative Language Learning Contract

Cooperative Language Learning Contract

Write down major aspects of what you have learned from participating in training session two. Then write down how you plan to implement each aspect. Share what you have learned and your implementation plans with your base group. Listen carefully to their major aspects and implementation plans. You may modify your own plans on the basis of what you have learned from your group mates. Volunteer one thing you can do to help each group mate with his or her implementation plans. Utilize the help group mates offer you. Sign each member's plans to seal the contract.

Major Learning	Implementation Plans

Date: _____

Participant's Signature: _____

Signatures of base group members: _____

_____

(taken from Johnson et al., 1998, p. 1:22)

4 Session Three: Lesson Planning I

Session Objectives

Participants will

- review instructional principles for structuring student interaction and tasks in CLL, including:
    - decisions in planning CLL activities and lessons
    - principles for structuring tasks (i.e., academic language learning)
    - principles for structuring interaction
- plan a CLL activity that fosters students' academic language competencies
- become acquainted with Pairs Check and Gallery Walk

Overview of the Session

Section	**Content**	**Instructional Technique**
(1) Base group meeting	Review of previous session and discussion of implementation assignment (Homework)	Base Groups
(2) Warm-up	English grammar exercise; teacher's role when planning a CL lesson	Pairs Check
(3) Introduction to session	Lesson planning based on five basic elements	Direct Instruction
(4) Lesson Planning I: Academic Lesson	One academic lesson plan from each pair which is presented and discussed with the whole training group	Lesson Planning Pairs and Gallery Walk
(5) Base group meeting	Sharing of what has been learned and how it will be implemented	Base Groups
(6) Conclusion and closure	Summary of session content and procedures	Direct Instruction

Implementation Assignments

- Use of the Pairs Check or the Gallery Walk Techniques
- Reading of additional texts.

Materials

Item	Numbers needed
Handouts (training manual, page 36 - 49)	one per participant
Visual presentation(slides 65 - 91)	one per trainer
Lesson planning form I	one per group

4.1 Base Group Meeting: Data Summary Chart

Task

Complete the data summary chart. Put the names of your base group members into the first line. Assess your own behavior and put the points into the appropriate column.
Ask your partners about their behavior and put their points into the appropriate column. Total your points and compute the average. Mark the points accomplished for the first session, the second session, and so on.

Data Summary Chart

	Names of Group Members				
Targeted Behaviors					
arrived in base group on time, ready to go to work					
did implementation assignment					
shared what I have learned in the training session					
did for fun and recreation					
...					
Total					

(0 Points = did not do, 1 Point = did okay, 2 Points = did extra well)

12 Points						
11 Points						
10 Points						
9 Points						
8 Points						
7 Points						
6 Points						
5 Points						
4 Points						
3 Points						
2 Points						
1 Point						
0 Points	**Session 1**	**Session 2**	**Session 3**	**Session 4**	**Session 5**	**Session 6**

(taken from Johnson et al., 2002)

4.2 Warm-up: How well do you know the English grammar?

Task

Correct the mistakes in the sentences below.

Cooperation: Working in pairs, read each of the sentences listed below, correct them, and write down your answer.

Criteria for success: correct answers by all group members

Individual Accountability: One member will be randomly selected to present the group's answers.

Expected Behavior: encouraging and praising

Intergroup Cooperation: Compare your answers with those of another group.

You have **15 minutes** to complete the task.

1) I have forgot to post the letter.

_____

2) There is four books on the table.

_____

3) I want that you learn your vocabulary for tomorrow.

_____

4) The best team won the football match.

_____

5) I saw a dog with his master with a long tail in the park.

_____

6) He couldn't remember nothing.

_____

7) One of the horses were tired.

_____

8) The man learnt him to swim.

_____

9) When started school yesterday?

_____

10) Do you sport?

_____

(sentences taken from Clarke & Preedy, 2006, p. 183)

Reflection

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this method/these methods be used in the EFL classroom?

New Cooperative (Language) Learning Method(s)

- Name of the method(s):

- Description of the method(s):

- What I like about the method(s):

- What to watch out for:

4.3 Lesson Planning I

To structure lessons so that students do in fact work cooperatively with each other, you must understand the basic elements that make cooperation work. Mastering the basic elements allows you to:

- Take your existing lessons, curricula, and courses and structure them cooperatively.
- Tailor cooperative learning lessons to your unique instructional needs, circumstances, curricular, subject areas, and students.
- Diagnose the problems some students may have in working together and intervene to increase the effectiveness of the student learning groups (taken from Johnson et al., 1998, p. 1:13).

In addition, pay attention to the following **guidelines**!

Guidelines for Planning a Lesson

Specify academic [and social skills] objective:
Every lesson has both a) academic and b) interpersonal and small group skills objective.

Decide on cooperative learning method:
The method must match the task and the academic objective of the lesson.

Decide on group size:
Learning groups should be small (pairs or groups of three members, four are the most). "The smaller the better!"

Decide on group composition (assign students to groups):
Assign students to groups randomly or select groups yourself. Usually you will wish to maximize the heterogeneity in each group.

Assign roles:
Structure student-student interaction by assigning roles such as Reader, Recorder, Encourager of Participation or Checker for Understanding in order to create interdependence.

Arrange the room:
Group members should be "knee to knee and eye to eye" but arranged so they all can see the instructor at the front of the room and do not disturb other groups.

Plan materials:
Decide how materials are to be arranged and distributed among group members to maximize their participation and achievement (taken from Johnson et al., 1998, p. 2:45)

Instructions for Lesson Planning I

Step 1:

- **Select a task and write it down in one or two sentences.**

Step 2:

- **Specify the academic objective.**

Step 3:

- **Select a cooperative language learning method.**

Step 4:

- **Make decisions on:**
- the group size
- the method of group composition
- the room arrangement
- the materials needed
- the criteria of success

Step 5:

- **Build in the five basic elements:**
- Positive interdependence
- Individual accountability
- Face-to-face promotive interaction
- Interpersonal and small group skills
- Group processing

Note:

1) Word the task in a neutral form.
2) Select one of the methods used in the training.
3) Structure three ways of positive interdependence.
4) Structure one way of individual accountability.

Lesson Planning Form I

Grade level: Subject area:

Task of the lesson:

Objectives of the lesson:

a) academic:

b) social:

Decisions:

a) CLL method (s):
Variation:

b) Group size: ☐two ☐three ☐four

c) Method of group composition:

d) Room arrangement: ☐room between groups
☐students able to see the instructor
☐students' access to materials

e) Materials needed: ☐one copy per group
☐one copy per person

☐ language support:

f) Criteria for success:

Five basic elements:

a) Positive interdependence	☐group goal:
	☐group reward:
	☐roles assigned:
	☐materials shared:
	☐other:
b) Individual accountability	☐each student evaluated:
	☐students check each other:
	☐random students evaluated:
	☐other:
c) Face-to-Face promotive interaction	☐seating: “knee-to-knee and eye-to-eye”
	☐ntergroup cooperation
d) Interpersonal and small group skills	
e) Group processing	

(adapted from Johnson et al., 1998, p. 2:47)

4.4 "Homework"

Task Difficulty

Probably the main reason that group activities fail is that the task is too difficult. Students at any level, even beginner level, can do cooperative learning, but the task must be suited to their level. This is similar to the situation with teaching reading, where the saying is, "Every reader is a good reader, when they have the right book." A key concept in adjusting task difficulty to students' level is the concept of scaffolding, i.e., providing support to students.

Here are some ways to provide the support so that tasks can be do-able:

- Pre-teach key concepts and information. For instance, if students are about to write an essay, the teacher might pre-teach how to write topic sentences for body paragraphs, and might pre-teach vocabulary related to the topic of the essay that students are going to write.
- Choose topics that students have knowledge about and topics that students find to be relevant and interesting.
- Provide a model, e.g. before students interview each other about their opinions, they listen to and/or read a dialogue of the same type of interview. The teacher can help students notice important features of that dialogue, such as the tenses and the language functions used.
- Divide the tasks into parts, and let students do one part at a time.
- […] Mix more and less proficient students in the same group, so that more proficient can help.

Increase task difficulty gradually. Here's an example

- First, students notice the verbs and other features in a paragraph of a particular text type, such as persuasive writing, e.g., a letter to convince someone to agree with the writer's opinion.
- Second, they do a cloze activity in which they fill in the blanks with the correct form of the verbs.
- Third, students reconstruct a text which they previously read and/ or listened to, paying attention to the verb tenses.
- Finally, students construct their own texts, using the same verb tense in line with the text type.

Give students an answer key so that they can check their answers. A variation in the case of a task without single right answers would be an answer guide that contains possible answers or main areas that an answer might address. In a group of two, each partner can have the answer key or answer guide for half of the questions (taken from Jacobs & Goh, 2007, pp. 14-15).

Assigning Students to Heterogeneous Groups: Examples

Counting Off

You divide the number of students in your class by the size of the group desired. For example: if you wish to have groups of three and you have thirty students in your class, you divide thirty by three.
You have students number off by the results (e.g. ten).
Students with the same number find each other (all one's get together, all two's get together, and so forth) (taken from Johnson et al., 1998, p. 2:7).

Literature Characters

Give students cards with the names of characters in the literature they recently have read.
Ask them to group with characters from the same story, play, or poem (taken from Johnson et al., 1998, p. 2:8).

Hand out Cards

Hand out cards to students as they enter the class with a [math] problem to solve, with each problem being different, and have them find the others in the room with the same answer. (If no one has the same answer, it may be wise to have them work it again!) (taken from Johnson & Johnson, 1990, p.15).

My example:

Roles: Examples

Roles that Help the Group Function

Roles that help the group achieve its goals and maintain effective working relationships among group members.

Explainer of ideas or procedures: shares one's ideas and opinions.

Recorder: writes down the group's decisions and edits the group's report.

Encourager of participation: ensures that all members are contributing.

Observer: records the frequency with which members engage in targeted skills.

Direction giver: gives direction to the group's work by 1) reviewing the instructions and restating the purpose of the assignment, 2) calling attention to the time limits, 3) offering procedures on how to complete the assignment most effectively.

Support giver: gives both verbal and nonverbal support and acceptance through seeking and praising others' ideas and conclusions.

Clarifier/Paraphraser: restates what other members have said to understand or clarify a message.

Roles that Help Students Formulate what they Are Learning

Summarizer: restates the group's major conclusions or answers or what has been read or discussed as completely and accurately as possible without referring to notes or to the original material.

Accuracy coach: corrects any mistakes in another member's explanations or summaries and adds important information that was left out.

Checker for understanding: ensures that all group members can explicitly explain how to arrive at an answer or conclusion.

Research-runner: gets needed materials for the group and communicates with the other learning groups and the teacher.

Elaborator: relates current concepts and strategies to material studied previously and existing cognitive frameworks.

Generator: generates additional answers by going beyond the first answer or conclusion and producing a number of plausible answers to choose from.

Roles that Help Students Ferment Students' Thinking

Criticizer of ideas, not people: intellectually challenges group mates by criticizing their ideas while communicating respect for them as individuals.

Asker for justification: asks members to give the facts and reasoning that justify their conclusions and answers.

Differentiator: differentiates the ideas and reasoning of group members so that everyone understands the difference in members' conclusions and reasoning.

Integrator: integrates the ideas and reasoning of group members into a single position that everyone can agree to.

Extender: extends the ideas and conclusions of other members by adding further information or implications.

Prober: asks in-depth questions that lead to analysis or deeper understanding.

Options generator: goes beyond the first answer or conclusion by producing a number of plausible answers to choose from.

Reality tester: tests the validity of the group's work by comparing it with the instructions, available time, the laws of nature, and other aspects of reality.

Category	Role	Primary	Intermediate	Secondary
Forming	Turn-taking Monitor	First you, than me	Take turns	Contribute in sequences
Functioning	Recorder	Writer	Recorder	Scriber
	Encourager of participation	Say nice things	Give positive comments	Compliment
	Clarifier, Paraphraser	Now you say it	Say it in your own words	Paraphrase
	Consensus Seeker	Everyone agree	Reach Agreement	Reach consensus
Formulating	Summarizer	Put together	Combine	Summarize
	Generator	Give another answer	Give additional answer	Generate alternative answer
Fermenting	Asker for justification	Ask why	Ask for reasons	Ask for justification
	Rationale Giver	Say why	Give facts and reasons	Explain

(taken from Johnson et al., 1994, pp. 4:3-4:6)

Simulation: Lesson Plan Presentation I

Task

Plan a lesson and present it.

When you have finished the lesson plans they will be posted in the room so that everyone can read them.

Each group member must take one of the follow roles:

- **Explainer**: explains the lesson plan to the other participants
- **Checker**: listens carefully

One group member presents the group's lesson plan to the other participants while the other reviews the lesson plans of the other participants.

Change roles after one turn.

Discuss the other's lesson plans and provide positive feedback (i.e., Name at least one thing you liked about the lesson plan. Name one thing that could be done even better next time.)

Cooperation: one lesson plan with both knowing how to conduct the lesson and being able to present it

Criteria for success: Both must be able to present the lesson plan.

Individual Accountability: Both must present the lesson plan to the other participants and the instructor.

Expected Behavior: active participation by both members and checking for understanding

You have **60 minutes** to complete the task.

Lesson Planning	**30 minutes**
Presentation	**30 minutes**

Reflection

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this method/these methods be used in the EFL classroom?

New Cooperative (Language) Learning Method(s)

- Name of the method(s):

- Description of the method(s):

- What I like about the method(s):

- What to watch out for:

4.5 Base Group Meeting: Cooperative Language Learning Contract

Cooperative Language Learning Contract

Write down major aspects of what you have learned from participating in training session three. Then write down how you plan to implement each aspect. Share what you have learned and your implementation plans with your base group. Listen carefully to their major aspects and implementation plans. You may modify your own plans on the basis of what you have learned from your group mates. Volunteer one thing you can do to help each group mate with his or her implementation plans. Utilize the help group mates offer you. Sign each member's plans to seal the contract.

Major Learning	**Implementation Plans**

Date: _____

Participant's Signature: _____

Signatures of base group members: _____

_____

(taken from Johnson et al., 1998, p. 1:22)

5 Session Four: Lesson Planning II

Session Objectives

Participants will become acquainted with:

- the significance of students' social language skills
- instructional principles for teaching and evaluating social language skills
- instructional principles for observation and group processing
- *Inside-Outside-Circle*
- plan a CLL activity that fosters students' social language skills

Overview of the Session

Section	Content	Instructional Technique
(1) Base group meeting	Review of previous session and discussion of implementation assignment (Homework)	Base Groups
(2) Warm-up	Interpersonal and small group skills needed for CL	Inside-Outside Circle
(3) Simulation: Introduction to social skills	Teaching social skills	Simulation: T-Chart and role play
(4) Lesson Planning II: Social Skill Lesson	One social skill lesson plan from each pair which is presented and discussed with the whole training group	Lesson Planning Pairs and Gallery Walk
(5) Simulation	Differences between describing and judging	Pairs Check (one observer per group using a structured observation form)
(6) Introduction to observation	Introduction to observation and group processing	Direct Instruction
(7) Lesson Planning III: Observing CL groups	One lesson plan from each pair (including a structured observation form) which is presented and discussed with the whole training group	Lesson Planning Pairs and Gallery Walk
(8) Warm-up	Steps in group processing (feedback, reflection, improvement goals, and celebration)	Index Cards
(9) Lesson Planning IV: Group Processing	One lesson plan from each pair (including a structured	Lesson Planning Pairs and

	observation form) which is presented and discussed with the whole training group	Gallery Walk
(10) Base group meeting	Sharing of what has been learned and how it will be implemented	Base Groups
(11) Conclusion and closure	Summary of session's content and procedures	Direct Instruction

Implementation Assignments

- Use of Inside-Outside Circle or another CLL techniques experienced in the training
- Teach a "social language skill lesson"
- Conducting a structured observation and a group processing activity
- Reading of additional texts

Materials

Item	Numbers needed
Handouts (training manual page, 52 - 74)	one per participant
Visual presentation(slides 92 - 147)	one per trainer
Lesson planning format II	one per group

5.1 Warm-up: Social Skills for CLL

Task
Name skills students need to work effectively in cooperative learning groups in the EFL classroom.

Procedure:

- Form two circles (an inner and an outer circle).
- Discuss the issue.
- Find another partner (the outer circle moves two partners to the right side).

Cooperation: Everyone must be able to name three skills students need.

Criteria for success: acceptable answers to the task

Individual Accountability: One person will be randomly picked to present his/her answers.

Expected Behavior: checking for understanding by all participants of the class

You have 1**0 minutes** to complete the task.

Reflection

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this method/these methods be used in the EFL classroom?

New Cooperative (Language) Learning Method(s)

- Name of the method(s):

- Description of the method(s):

- What I like about the method(s):

- What to watch out for:

5.2 Simulation I: Social Skill of the Day

Task

Act out the situation.

Cooperation: Each member must take one of the following roles:

- Peter – number 1
- Student A – number 2
- Student B – number 3

Cooperative skill of the day:

Our definition:

Looks like	Sounds like

Reflection

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this method/these methods be used in the EFL classroom?

New Cooperative (Language) Learning Method(s)

- Name of the method(s):

- Description of the method(s):

- What I like about the method(s):

- What to watch out for:

5.3 Lesson Planning II

Placing socially unskilled students in a group and telling them to cooperate does not guarantee that they are able to do so effectively. We are not born instinctively knowing how to interact effectively with others. Interpersonal and small group skills do not magically appear when they are needed. You must teach students the social skills required for high quality cooperation and motivate students to use the skills if cooperative groups are to be productive (taken from Johnson et al., 1994, p. 9:1).

Guidelines for Teaching Social Skills

Students need to:

1) see the **need for using the skill**.
2) have a **clear understanding** of how to engage in the skill.
3) **practice the skill** in meaningful situations.
4) **receive feedback** on how well the skill is performed.
5) **practice** the skill until the skill is **integrated and automatic** (adapted from Johnson et al., 1998, pp. 5:13 – 5:16)

Follow the **three rules of teaching social skills**:

1) Be specific. Operationally define each social skill by a T-Chart.

2) Start small. Do not overload your students with more social skills than they can learn at one time. One or two skill(s) to emphasize for a few lessons is/are enough.

3) Emphasize overlearning. Having students practice skills once or twice is not enough. Keep emphasizing a skill until the students have integrated it into their behavioral repertoires and do it automatically and habitually (taken from Johnson et al., 1998, p. 5:5)

Instructions for Lesson Planning II

Step 1:

- **Select a social skill that you are going to teach and write it down.**

Step 2:

- **Decide how your students will see the need of the skill.**

Step 3:

- **Specify how you will help your students to understand what the skill is and when it should be used.**

Step 4:

- **Fill out a T-Chart.**

Step 5:

- **Plan how you will ensure that your students practice the skill.**

Note:
Start by choosing a social skill from the "**Functioning**" category (see page 46)!

Lesson Planning Form II

Cooperative skill:

Definition:

Help students see need for skill by:
☐asking students to brainstorm what skills are needed to help groups function more effectively
☐telling students why the skills are needed
☐having a bulletin board display
☐distributing jigsaw materials on the need for the skill
☐other:

Help students understand what the skill is and when it should be used by:
☐having students help make a classroom T-Chart analyze the skill
☐having students discuss when it is appropriate to use the skill
☐having students practice using the skill with a partner
☐other:

Looks like **(nonverbal, body language)**	**Sounds like** **(verbal statements, sentence starters)**

Ensure that students practice the skill by:
☐having practice sessions before each formal cooperative learning lesson
☐announcing that I will observe for the skill
☐giving positive feedback to anyone who demonstrates the skill
☐assigning the skill as a role
☐other:

(adapted from Johnson et al., 1998, p. 5:24)

Teaching Social Skills

Numerous interpersonal and small group skills affect the success of cooperative efforts (Johnson, 1991, 1997; Johnson & F. Johnson, 1997; Johnson & R. Johnson, 1994).

What cooperative skills teachers emphasize in their classes depends on what their students have and have not mastered. As teachers observe and monitor their students working in cooperative learning groups the teachers will notice where students lack important skills.

Our list of required student behaviors may give teachers a starting point in examining how skillful their students are.

There are **four levels of cooperative skills**:

- **Forming**: The bottom-line skills needed to establish a functioning cooperative learning group.
- **Functioning**: The skills needed to manage the group's activities in completing the task and in maintaining effective working relationships among members.
- **Formulating**: The skills needed to build deeper-level understanding of the material being studied, to stimulate the use of higher quality reasoning strategies, and to maximize mastery and retention of the assigned material.
- **Fermenting**: The skills needed to stimulate reconceptualization of the material being studied, cognitive conflict, the search for more information, and the communication of the rationale behind one's conclusion (taken from Johnson et al., 1998, p. 5:6).

Type of Social Language Skills	Appropriate Behavior and Language Use
Forming Skills	- move into groups quietly - stay with the group - use quiet voices - take turns - use names, look at speaker - no "put-downs"
Functioning Skills	- share ideas and opinions - asks for facts and reasoning - give direction to the group's work - encourage everyone to participate - ask for help and clarification - express support and acceptance - offer to explain and clarify - paraphrase other's contributions - energize the group - describe feelings when appropriate
Formulating Skills	- summarize out loud completely - seek accuracy by correcting/ adding to summaries - help the group find clever ways to remember - check understanding by demanding vocalization - ask others to plan for telling/ teaching out loud

Fermenting Skills	- criticizing ideas without criticizing people - differentiate ideas and reasoning of members - integrate ideas into single positions - ask for justification on conclusions - extend answers - probe by asking in-depth questions - generate further answers - test reality by checking the group's work

(taken from Johnson et al., 1998, p. 5:3)

Cooperative Skills and Language Functions

There are many cooperative skills that help groups collaborate. These include thanking others, praising others, asking for help, giving help, checking that others understand, asking for clarification, confirming own understanding, offering suggestions, showing support and encouragement, asking for/ giving reasons, exploring ideas and disagreeing politely. Listening actively is also an important skill for cooperative learning.

These cooperative skills overlap with language functions, and are supported by appropriate language use. A language function is a purpose for which people use language. Indeed, some language teaching syllabi have been organized around language functions. An example of the overlap between cooperative skills and language functions is that *thanking others* is both a cooperative skill and a language function. Some of the phrases associated with the cooperative skill/ language function of thanking others are "Thank you very much," "I appreciate that," "Very kind of you."

Common expressions that support the use of various cooperative skills:

- **Checking that others understand**
  Could you please say that in your own words?
  If the teacher calls our group to answer the question, what will you say?
  What should we say to explain our answer?
  X, does what I say make sense to you?

- **Asking for clarification**
  Could you please explain that?
  What does … mean, please?
  Could you please give me an example?
  I'm not sure I understand what you mean by …

- **Conforming own understanding**
  When you said …, do you mean …?
  So are your saying …?
  Am I right to say that you were …?
  Let me repeat that to you.

- **Offering suggestions**
  Well, we could …
  Another way to do that is …
  I wonder if we could also do it like this: …?

I have an idea. How about …?

- **Showing support/ encouragement**
  That's a brilliant/ very good idea.
  I like your suggestion very much.
  That's good! Tell us more.
  I think it will work.

- **Asking for reasons**
  Could you tell us why you said …?
  What makes you say that?
  How is … useful/ relevant?
  What reasons can we give to support this point?

- **Exploring alternative perspectives**
  Let's look at it another way …
  What if …
  What would happen if …
  If … then …
  Suppose …

- **Disagreeing politely**
  I can see why you said that, but …
  I'm not so sure about that myself.
  I don't completely agree. I think that …

This same cooperative skill/ language functions overlap exists for other cooperative skills listed in the first paragraph […]. Thus, we language teachers are fortunate, because we can "feed two birds with one hand," i.e., at the same time that we help students work together more effectively, we also help them improve their language skills. By teaching our students important cooperative learning and language skills, we are also supporting them in their learning of other curriculum subjects (taken from Jacobs & Goh, 2007, pp. 20-21).

5.4 Simulation II: Describing or Judging

Task

Decide for each statement below whether it is a description or a judgment.

Cooperation: Working in triads, read each of the statements listed below and write down your answer.

- Put a "D" for each statement that describes a person's behavior.
- Put a "J" for each statement that judges a person's behavior.

Procedure:

- Person A answers the first statement, person B is the coach.
- Person B checks if person A's answer is correct and praises A for right answers.
- The roles are revised after every statement and the procedure is repeated.
- When finished, the answers are compared with those of another group.
- Person C is the observer. The observer:
    - Lists names of members above each column on the observation sheet.
    - Places a tally mark in the appropriate box whenever a member uses the skills you are observing for (i.e., encouraging and praising).
    - Totals the column and totals when the group session is over.

Criteria for success: correct answers by all group members

Individual Accountability: One participant will be randomly picked to present the answers.

Expected Behavior: "encouraging" and "praising"

Intergroup Cooperation: Compare your answers with those of another group when finished.

You have 1**0 minutes** to complete the task.

☐ Sam interrupted Sally when she tried to explain the role of the teacher in the cooperative classroom.

☐ Mark is very sincere.

☐ Sue never understands what Jack is saying.

☐ Sally is rude and ungrateful.

☐ Sam changed the subject.

☐ Jane's trying to make me mad.

☐ It is a great day today.

☐ That is the fourth time that you finished one of my sentences.

☐ Sam and Mark have made the most statements during this exercise.

☐ Jane is very shy. (sentences taken from Johnson, Johnson, & Holubec, 1992, p. 10:15)

Reflection

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this method/these methods be used in the EFL classroom?

New Cooperative (Language) Learning Method(s)

- Name of the method(s):

- Description of the method(s):

- What I like about the method(s):

- What to watch out for:

5.5 Lesson Planning III: Observing Students in Cooperative Learning Groups

Teachers are always observing and noticing what is going on around them. They look to see who is and who is not on task, which students are out of their seat, which students look puzzled, and which students are finished and waiting for their next assignment.
Observation is a primary tool of assessing learning and instruction. It may be defined as the recording and describing of behavior as it occurs.

Its purpose is to provide objective data about:

- **The quality of student performances:**
  Many student performances, such as giving a speech, providing leadership, helping a classmate, or using higher-level reasoning can only be assessed through direct observational methods.
- **The quality of the processes and procedures students use in complementing assignments:**
  To improve continuously the process of learning, students must receive feedback concerning their actions in completing an assignment. The process of learning is primarily assessed through observation.
- **The processes and procedures teachers use in conducting lessons:**
  If teachers are to improve continuously they need feedback on their actions in conducting class sessions and teaching a course. The process of instruction is primarily assessed through observation.

Note:

A major problem with observations is the potential **lack of objectivity by the observers**. A solution to the problem is the use of **structured coding systems**, which require observers to categorize each group behavior into an objectively definable category (taken from Johnson et al., 1998, p. 6:1)

Guidelines for Observing

1) Observe in an **objective and descriptive** way!
2) Limit your observation to **directly observable behaviors**.
3) Use a **category system** for observing. (Use mutually exclusive categories, which are precise, distinguishable, and independent from other categories.)
4) Use specified, uniform **time limits**.
5) Gather data on **every group**.
6) **Feedback** the data to the groups and/or to the class as a whole.

Instructions for Lesson Planning III

Step 1:

- **Select actions to observe.**

Actions to observe are:

- on-task or off-task behavior
- academic efforts, procedures, and strategies
- socials skills

Step 2:

- **Construct an (age and proficiency appropriate) observation form or unstructured procedure to record the frequencies of targeted actions.**

A structured observation form is structured by:

- defining exactly what behaviors, actions, skills, or events are being observed
- entering the actions to be observed in the first column (each action or skill is placed in a separate row; the final row is reserved for the total of the columns)
- making an additional column for each member of the group, and making a final column to record the total for each row on the form
- making sure all columns are clearly labeled and wide enough to enter data

Step 3:

- **Decide who will observe.**

Observers are:

- teachers (always observe)
- students (experienced students should be trained as observers; they may be roving observers or they may observe their own group)

Step 4:

- **Plan a route through the classroom by constructing a sampling plan.**

Plan how much time you will spend observing for each learning group (entire class period, five minutes, or two minutes).

(adapted from Johnson et al., 1998, p. 6:6)

Lesson Planning Form III

Students' actions I wish to observe are:

Cognitive reasoning	**Social skills**

The **procedure** will be:

- ☐ formal (with an observation form)
- ☐ checklist
- ☐ informal
- ☐ other:

The **observers** will be:

- ☐ teacher(s)
- ☐ students:
- ☐ visitors

The **route through the classroom** will be:

(taken from Johnson et al., 1998, p. 6:39)

Observation Form

Directions for Use:

1. Put the names of the group members above each column.
2. Put a tally mark in the appropriate box each time a group member contributes.
3. Make notes on the back when interesting things happen that are not captured by the categories.
4. Write down one (or more) positive contribution(s) made by each group member.

Assignment: _____

Action					Total
Total					

(taken from Johnson et al., 1998, p. 6:41)

5.6 Lesson Planning IV: Group Processing

If cooperative learning groups are to function effectively, and students' achievement is to be maximized, regular group processing is a necessity (taken from Johnson et al., 1998, p. 7:1).

Group processing is members reflecting on the group's work and members' interaction to clarify and improve members' efforts to achieve the group's goals and maintain effective working relationships by:

- describing what members actions were helpful and
- making decisions about what actions to continue or change.

Group processing occurs at two levels:

- *small group processing* and
- *whole-class processing*

The purposes of group processing are to:

- improve continuously the quality of the group's taskwork and teamwork
- increase individual accountability by focusing attention on each member's responsible and skillful actions to learn and to help group mates learn
- streamline the learning process to make it simpler (reducing complexity)
- eliminate unskilled and inappropriate actions (error-proofing the process) (taken from Johnson et al., 1998, 7:3).

The teacher structures group processing at the end of every lesson by:

- setting aside time for students to reflect on their experiences in working with each other
- provide procedures for students to use in discussing group effectiveness (such as, "*List three things your group is doing well today and one thing you could improve*").

Every fifth group session, a longer period of time should be used for a more detailed discussion of the process the group is using to maximize members' learning (taken from Johnson et al., 1998, p. 7:4).

Guidelines for Group Processing

1) Ensure that each student, each group, and the class receives (and gives) feedback on the effectiveness of task work and teamwork [**FEEDBACK**].

2) Ensure that students analyze and reflect on the feedback they receive [**REFLECTION**].

3) Help individuals and groups set goals for improving the quality of their work [**IMPROVEMENT GOALS**].

4) Encourage celebration of members' hard work and the group's success [**CELEBRATION**].

(adapted from Johnson et al., 1998, p. 7:4)

Feedback Procedures: Examples

<u>Procedure 1</u>:

Having each group focus on one member at a time. Members tell the target person the thing he/she did that helped them learn or work together effectively. The focus is rotated until all members have received positive feedback.

<u>Procedure 2</u>:

Having members write a positive comment about each other member's participation on an index card. The students then give their written comments to each other so that every member will have, in writing, positive feedback from all the other group members.

<u>Procedure 3</u>:

Having members comment on how well each other member used the social skills by writing an answer to one of the following statements. The students give their written statements to each other.

- *I appreciated it when you …*
- *I liked it when you …*
- *I admired you when you …*
- *I enjoyed it when you …*
- *You really helped out the group when you …*

This procedure may also be done orally. In this case students look at the member they are complementing, use his or her name, and give their comments. The person receiving the positive feedback makes eye contact and says nothing or "thank you". Positive feedback should be directly and clearly expressed and should not be brushed off or denied.

(taken from Johnson et al., 1998, p. 7:6)

Reflection Procedures: Examples

Procedures for Analysis of Observation Data

<u>Procedure 1</u>:

After observing students you can provide **direct feedback** to each student.

You might say*:*

"Helen contributes ten times, Roger seven times, and Frank twice. Frank encouraged others to participate ten times, and Roger and Helen twice. Roger summarized five times, Frank twice, and Helen once" (example taken from Johnson et al., 1998, p. 7:7)

<u>Procedure 2</u>:

You also show them the data and ask them to reach their **own conclusion** about their participation.

You might say:
"Look at the totals in the rows and columns (see observation form).
What conclusions could you make about:

- *your participation in the lesson?*

the effectiveness of the group in completing the assignment?" (example taken from Johnson et al., 1998, p. 7:7)

In summarizing you might say:

"*Each of you will wish to set a personal goal for how you can be even more effective tomorrow than you were today.*
What actions did you engage in most and least?
What actions were more and least appropriate and helpful under the circumstances (summarizing right after someone else summarized may be inappropriate and unhelpful)?
What actions would have helped the group work more effectively?
Decide on a personal goal to increase your effectiveness and share it with the other group members." (example taken from Johnson et al., 1998, p. 7:7)

Procedures for Small Group Processing

Procedure 1:

Give group members 30 seconds to identify three things other members did to help others learn. Every member is heard from in a short period of time.

You might say and/or write:

"*Think of something that each group member did to improve group effectiveness. Tell them what it is".*

Procedure 2:

Give group members a series of questions concerning their effective use of skills.

You might ask:

"*How did other group members encourage participation?"*
"How did other group members check for understanding?"

Each group member gives his or her response and then consensus is achieved through discussion.

Procedure 3:

Make the last question on an assignment sheet a group-processing question. This signals that group processing is an integral part of one's learning.

(taken from Johnson et al., 1998, p. 7:8)

Procedures for Whole Class Processing

Procedure 1:

You can share observations with the whole class. (Charting data to get a continuous record of class improvement is always a good idea. You may wish to give the class a reward when the class total exceeds a present criterion of excellence.)

Procedure 2:

You can add together the observation results of the student observers for an overall class total. (Chart the data.)

Procedure 3:

You can ask students to:

- **describe things they did to help each other learn**,
- **discuss members' answers in the group for a minute or two and arrive at a consensus on an answer**, and
- **share their group's answer with the class as a whole.**

(Since this procedure takes time, three questions may be as many as you will wish to ask.)

(taken from Johnson et al., 1998, p. 7:9)

Improvement Goals: Examples

Procedure1:

Have students set specific behavioral goals for the next group session. Have each student pick a specific social skill to use more effectively (an ”I” focus) and/or have the group reach consensus about which collaborate skill all group members will practice in the next session (a “we” focus). The group can be required to hand in a written statement specifying which social skill each member is going to emphasize during the next work session.

Procedure 2:

In a whole-class processing session, ask each group to agree on one conclusion to the statement, *“Our group could do better on social skills by…, “* and tell their answers to the entire class. You write the answers on the board under the title “Goals”. At the beginning of the next cooperative learning lesson, you publicly read over the goal statements and remind students what they agreed to work on during this session.

Procedure 3:

Have each student write an answer to one of the following questions before the next cooperative learning session:

- Something I plan to do differently next time to help my group is ...
- The social skill I want to use next time is ...
- How I can help my group next time is ...
- Two things I will do to help my group next time are ...
- One social skill I will practice more consistently next time is ...

As an optional activity, have students plan where, outside the class, they apply the social skills they are learning in class. Ask them to make connections between the cooperative learning groups and the rest of their lives. Have them specify times in the hallway, playground, home, church, or community where they can use the same social skills they are learning in class. Both “I” and “we” focuses are useful.

(taken from Johnson et al., 1998, p. 7:10)

Lesson Planning Form IV

Assessment
☐ assessment of members' individual learning:

☐ assessment of group productivity:

Feedback
☐ positive feedback to each student:

Reflection
☐ small group processing:

☐ whole class processing

☐ charts and graphs used:

Improvement Goals
☐ goal setting for improvement:

Celebration
☐ celebration:

(adapted from Johnson et al., 1998, p. 2:48)

5.7 Base Group Meeting: Cooperative Language Learning Contra

Cooperative Language Learning Contract

Write down major aspects of what you have learned from participating in training session four. Then write down how you plan to implement each aspect. Share what you have learned and your implementation plans with your base group. Listen carefully to their major aspects and implementation plans. You may modify your own plans on the basis of what you have learned from your group mates. Volunteer one thing you can do to help each group mate with his or her implementation plans. Utilize the help group mates offer you. Sign each member's plans to seal the contract.

Major Learning	**Implementation Plans**

Date: _____

Participant's Signature: _____

Signatures of base group members: _____

_____

(taken from Johnson et al., 1998, p. 1:22)

6 Session Five: Conducting a CLL Lesson I

Session Objectives

Participants will:

- become acquainted with an *explanatory model* of appropriate and inappropriate instructional and verbal behavior in CLL
- classify appropriate and inappropriate behavior
- practice the presentation of a task

Overview of the Session

Section	**Content**	**Instructional Technique**
(1) Base group meeting	Review of previous session and discussion of implementation assignment (Homework)	Base Groups
(2) Warm-up	Reflection of individual competences when conducting CL	Think-Pair-Share
(3) Introduction to session	Presentation of the topic	Direct Instruction
(4) Explanatory model: The origin of behavior	Explanation of the origin of appropriate and inappropriate instructional and verbal behavior using a simplified process model	Direct Instruction
(5) Differentiation exercise: Appropriate and inappropriate instructional and verbal behavior	Classification and comment on different teacher's actions in different situations (three types)	Pairs Check
(6) Role plays with video-feedback[4]: Presenting a task (including a CLL method)	Guided practice of presenting a task	Role Plays
(7) Base group meeting	Sharing of what has been learned and how it will be implemented	Base Groups
(8) Conclusion and closure	Summary of session's content and procedures	Direct Instruction

[4] Role plays and video-feedback are guided by instructor or co-trainers.

Implementation Assignments

- Use of the conceptual framework (i.e., five basic elements)
- Practice of appropriate instructional behavior when presenting a task
- Three personal positive self-verbalizations

Materials

Item	Numbers needed
Handouts (training manual, page 77 - 89)	one per participant
Visual presentation(slides 148 - 159)	one per trainer
Television sets	one per group of three or four participants
video cameras	one per group of three or four participants

6.1 Warm-up: I Feel Competent When

Task
Complete the sentences.

I feel competent when …

☐ ***I am presenting a task, because ...***

☐ ***I am intervening in cooperative learning groups, because ...***

☐ ***I am guiding group processing, because*** *...*

I would like to learn more about …

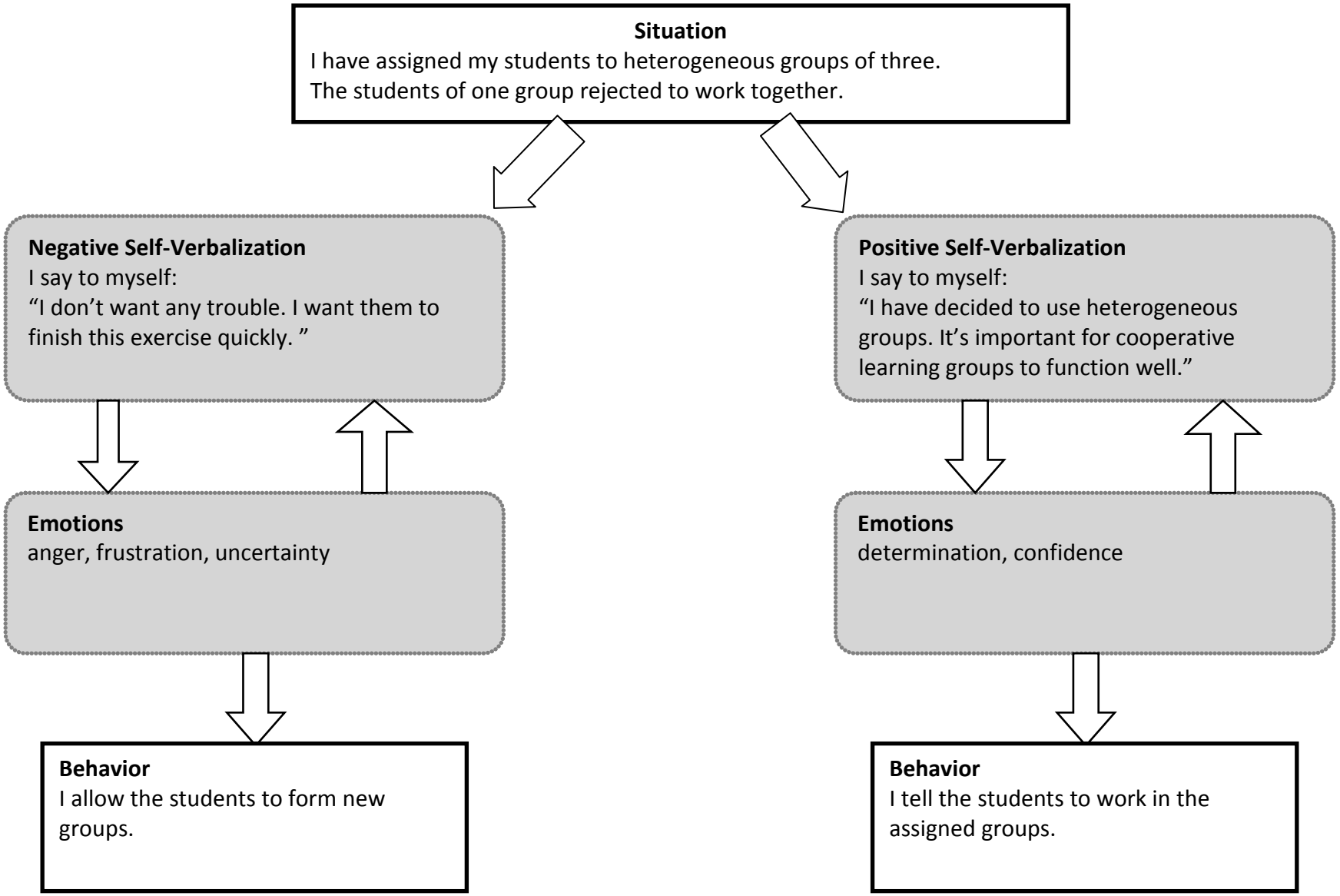
☐ ***presenting a task, because*** *...*

☐ ***intervening in cooperative learning groups, because*** *...*

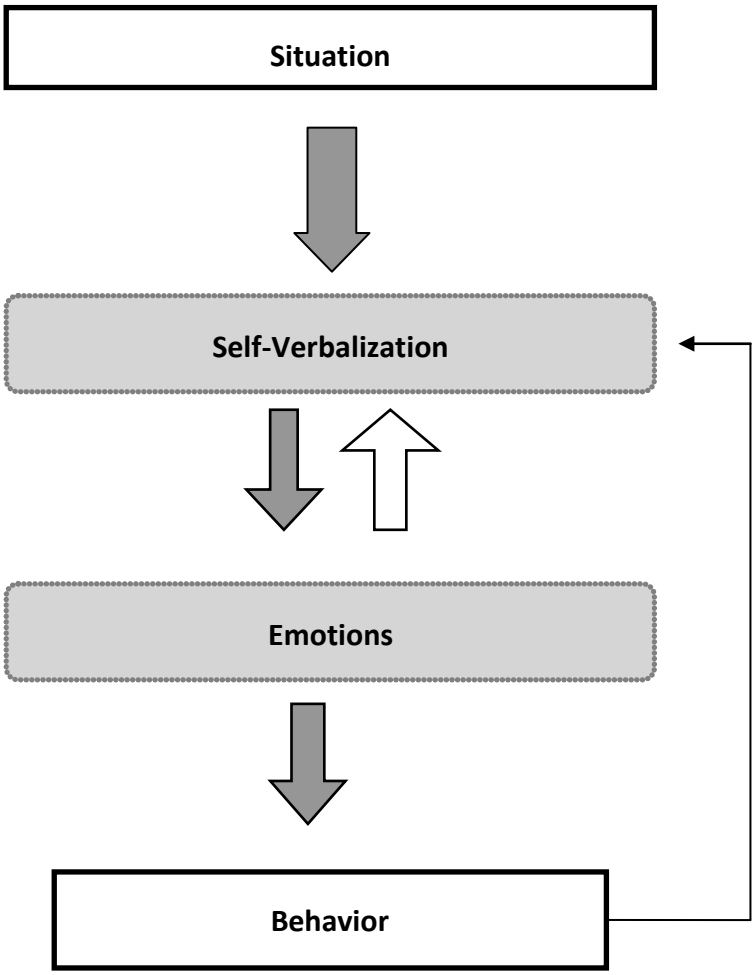
☐ ***guiding group processing, because*** *...*

(adapted from Hinsch & Pfingsten, 2007)

The Origin of Behavior (adapted from Hinsch & Pfingsten, 2007, p. 140)

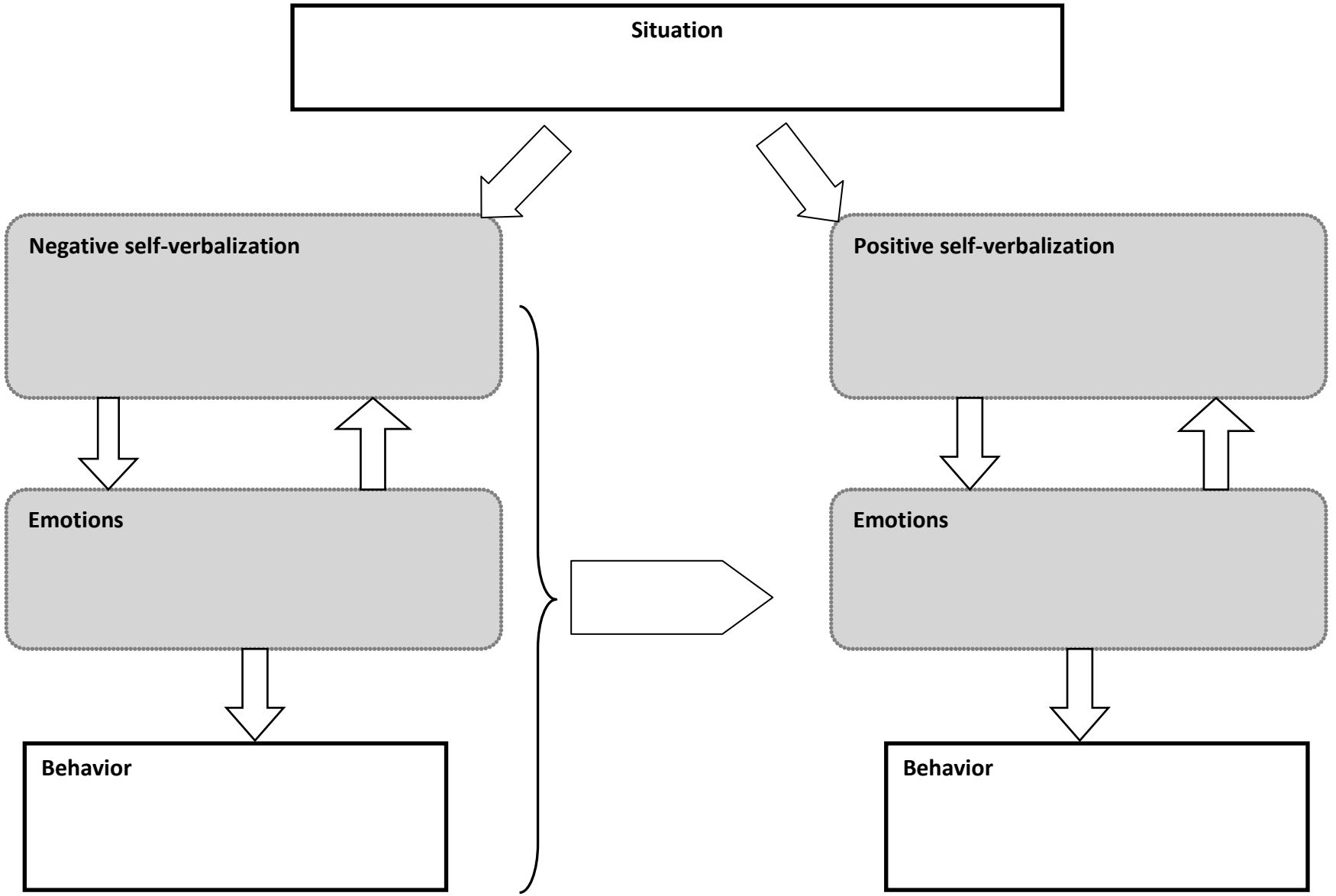


6.2 An Explanatory Model of the Origin of Behavior



(taken from Hinsch & Pfingsten, 2007)

The Origin of Behavior (taken from Hinsch & Pfingsten, p. 143)



Self-Verbalizations

How do self-verbalizations work?

Our behavior is always accompanied by short statements (i.e., so-called self-verbalizations) that we say to ourselves. We are often not aware of these "monologues inside our head" but we can be. They have a vital impact on our behavior and emotions.

What do self-verbalizations cause?

Troubles and problems often arise because we are caught in an unpleasant situation. In addition, these problems often last because we comment on them in an unhelpful way. In order to cope with troubles and problems effectively it is necessary to replace unhelpful (i.e., negative) self-verbalizations by helpful (i.e., positive) self-verbalizations.

Unhelpful (negative) self-verbalizations:	**Helpful (positive) self-verbalizations**
do not support personal long-term goals	support personal long-term goals
address the past	address the future
discourage oneself	encourage oneself
always circle the same affair	are diverse and apply to the affair
hold images of catastrophes ⇩ You feel **helpless** and **passive or get into a bad mood.**	**avoid discouraging prognoses** ⇩ You e**ncourage yourself to be active.**

The best way to change your self-verbalizations is to become aware of them.

(adapted from Hinsch & Pfingsten, 2007)

6.3 Differentiation of Appropriate and Inappropriate Instructional and Verbal Behavior in CLL

Task

Below are descriptions of teachers' actions in the cooperative learning classroom.

Decide whether the actions of the teachers in the following situations are appropriate or inappropriate. Indicate the appropriate behavior with an "a" and inappropriate with an "i".

	Situation	Reaction		Comments
1	While working in cooperative learning groups, Simon talks about his experiences at a basketball game last weekend.	The teacher ignores it.	☐	
2	The students are working in pairs. Jenny turns to Clara and says: "Smart aleck, working with you really annoys me."	The teacher says: "Oh, hasn't Clara explained the solution clear enough? Jenny, please ask Clara to explain the aspects you have not understood so well."	☐	
3	Teacher X has just presented the task of the lesson and the cooperative learning method. Peter says: "Sorry, I don't know what to do?"	The teacher replies: "Oh, that's too bad. I will not explain it again."	☐	
4	The students of one group are using their assigned roles, their cooperative skills (in general), and are on task.	The teacher smiles, nods and says: "Good group! Keep up the good work!"	☐	
5	The members of one group have problems to find the right solution for an assignment.	The teacher tells the students the right answers.	☐	
6	Teacher Y has explained the task and the	The teacher asks another student to	☐	

	cooperative learning method to the students and checked whether they have understood everything. Sam says: “I didn’t get it!”	explain the task and the method again and examines whether all students have understood the task again.		
7	The students of class 3d have been working in cooperative learning groups for the first time. During the course of the class time some shouted at each other, some did the task, and others played cards.	At the end of the lesson the teacher says: “I have noticed that you didn’t do a good job. You need to improve your social skills.”	☐	
8	The students of class 3a have been working in cooperative learning groups for the first time. Today they had to practice the social skill “Use quiet voices”. Most of them used the skill frequently.	At the end of the lesson the teacher says: “Rate yourself from 1 (low) to 10 (high) on “Use quiet voices. Share your rating with your group members and explain why you rated yourself the way you did. Plan how to increase the frequency with which you and your group members use this skill.”	☐	
9	The students have been placed into groups of three and the task has been presented. When starting to work, the whole class gets very noisy.	The teacher shouts: “There’s far too much noise. It is unbearable!”	☐	
10	The members of one group have had trouble with using the cooperative skill “Encouraging.” Today, they try hard to work on it.	The teacher is delighted to see their efforts and carries on observing the other groups.	☐	

(adapted from Hinsch & Pfingsten, 2007, pp. 152-156)

6.4 Simulation: Presenting a CLL Task

Below you will find descriptions of different situations in the cooperative learning classroom and instructions for appropriate teacher behavior.

Please indicate the degree of difficulty on a scale from 0 (not difficult) to 100 (very difficult).

Situation	Instruction	Degree of Difficulty
You use the **Think-Pair-Share technique** in one of your English classes for the first time.	Look at the students, smile, have eye contact, wait until they look at you. Explain the task of the lesson and the cooperative learning method.	
You use the **Reading Comprehension Triads technique** in one of your English classes for the first time.	Look at the students, smile, have eye contact, wait until they look at you. Explain the task of the lesson and the cooperative learning method.	
You use the **Placemat technique** in one of your English classes for the first time.	Look at the students, smile, have eye contact, wait until they look at you. Explain the task of the lesson, and the cooperative learning method.	
You use the **Jigsaw technique** in one of your English classes for the first time.	Look at the students, smile, have eye contact, wait until they look at you. Explain the task of the lesson and the cooperative learning method.	
You use the **Gallery Walk technique** in one of your English classes for the first time.	Look at the students, smile, have eye contact, wait until they look at you. Explain the task of the lesson and the cooperative learning method.	
You use the **Inside-Outside Circle technique** in one of your English classes for the first time.	Look at the students, smile, have eye contact, wait until they look at you. Explain the task of the lesson and the cooperative learning method.	
You use the **Pairs Check technique** in one of your English classes for the first time.	Look at the students, smile, have eye contact, wait until they look at you. Explain the task of the lesson and the cooperative learning method.	

(adapted from Hinsch & Pfingsten, 2007, pp. 144-146)

Instructions for Presenting a CLL Task

BEFORE the situation

- Define your goal.
- Give yourself positive instructions (e.g. “I can do it!”)

IN the situation

- Speak loud enough so that all students can hear you.
- Use short sentences.
- Use “easy” (appropriate) vocabulary.
- Be precise.
- Be friendly and respectful (smile, use open gestures, have eye contact).
- Check if your students have understood the task and the cooperative learning method.

AFTER the situation

- Praise yourself for what you did well while instructing the students.

Keep in mind:

Wait until all students look at you and listen to you!

Make sure that all students know what to do!

(adapted from Hinsch & Pfingsten, 2007, p. 157)

Guidelines for presenting a CLL task

Step 1:

- **Explain the task:** Inform the class **what to do to** complete the assignment and **how to do it.**

You might say:

- "Your task is to […]".
- Explain the objectives of the lesson.
- "At the end of the lesson all of you should be able to name and explain […]".
- Explain the concepts and principles students need to know to complete the assignment and relate them to earlier learning experiences.
- Explain the procedures they are to follow (adapted from Johnson et al., 1994, pp. 7:1-7:2).

Step 2:

- **Assign students to groups and structure face-to-face interaction:** Inform the class **how to form groups, where to sit** and remind them to sit "knee-to-knee" and "eye-to-eye".

You might say:
"… "

Step 3:

- **Explain the criteria for success:** Students work should be evaluated on a **criteria-referenced** basis.
- Make clear your criteria for evaluating students' work.

You might say:

- "*The group is not finished until every member has demonstrated mastery*."
- or for improvement: "[…]*doing better this week than last week"*
- or promotion of intergroup cooperation: "*If we as a class can score over 520 words correct on our vocabulary test, each student will receive two bonus points*." (examples taken from Johnson et al., 1998, p. 2:17)

Step 4:

- **Structure positive interdependence:** Students must believe that they **"sink or swim together"**. Always establish **mutual goals** (students are responsible for their own learning and the learning of all other group members). Supplement goal interdependence with **celebration/reward, resource, role,** and **identity interdependence.**

- **First**, you structure positive goal interdependence.

You might say:

- *"You have three responsibilities. You are responsible for learning the assigned material. You are responsible for making sure that all other members of your group learn the assigned material. And you are responsible for making sure that other class members successfully learn the assigned material."*

- **Second**, you supplement positive goal interdependence with other types of positive interdependence (such as reward, role, or identity).

You might say: (for example, reward interdependence)

- *"If all members of your group score above 90 percent on the test, each of you will receive five bonus points."* (taken from Johnson et al., pp. 2:17-2:18)

Step 5:

- **Structure individual accountability:** Each student must **feel responsible** for doing his or her fair share of work (Johnson et al., 1998, p. 2:18). Ways to ensure accountability are frequently **oral quizzing** of group members picked at random, **individual tests**, and assigning a member the **role of Checker for Understanding** (adapted from Johnson et al., 1998, p.2:18).

You might say: (e.g., randomly picking up one group member to explain the assignment)

- *"At the end of the lesson I will randomly choose one group member to present the results."*

Step 6:

- **Specify desired behaviors:** The more specific you are about the behaviors you want to see in the groups, the more likely students will do them. Social skills may be classified as forming (staying with the group, using quiet voices), functioning (contributing, encouraging others to participate), formulating (summarizing, elaborating), and fermenting (criticizing ideas, asking for justification). Regularly teach the interpersonal and small group skills you wish to see used in the learning groups (adapted from Johnson et al., 1998, p. 2:19).

Step 7:

- **Check for understanding: Check** whether your students have understood the **task** and the **cooperative learning method** (adapted from Johnson et al., 1994, p. 7:2).

6.5 Base Group Meeting: Cooperative Language Learning Contract

Cooperative Language Learning Contract

Write down major aspects of what you have learned from participating in training session five. Then write down how you plan to implement each aspect. Share what you have learned and your implementation plans with your base group. Listen carefully to their major aspects and implementation plans. You may modify your own plans on the basis of what you have learned from your group mates. Volunteer one thing you can do to help each group mate with his or her implementation plans. Utilize the help group mates offer you. Sign each member's plans to seal the contract.

Major Learning	**Implementation Plans**

Date: _____

Participant's Signature: _____

Signatures of base group members: _____

_____

(taken from Johnson et al., 1998, p. 1:22)

7 Session Six: Conducting a CLL Lesson II

Session Objectives

Participants will:

- practice intervening in CLL groups
- practice group processing in CLL groups

Overview of the Session

Section	**Content**	**Instructional Technique**
(1) Base group meeting	Review of previous session and discussion of implementation assignment (Homework)	Base Group
(2) Warm-up: Positive self-verbalizations	Sharing of positive self-verbalizations	Whole Class Discussion
(3) Introduction to session	Intervening and Group Processing	Direct Instruction
(4) Role plays with video-feedback: Intervening	Guided practice on intervening	Role Plays
(5) Warm-up	Difference between positive (useful) and negative (not useful) self-verbalizations	Angel & Devil[5]
(6) Role plays with video-feedback: Group processing	Guided practice on group processing	Role Plays
(7) Base group meeting	Sharing of what has been learned and how it will be implemented	Base Groups
(8) Conclusion and closure	Summary of session's content and procedures	Direct Instruction

[5] Two participants volunteer to be either an angel or a devil. They are seated back-to-back. The angel presents a situation and related positive self-verbalizations and the devil opposing negative self-verbalizations.

Implementation Assignments

- Use of the conceptual framework (i.e., five basic elements of CLL)
- Practice of appropriate instructional behavior when intervening in groups and conducting group processing

Materials

Item	Numbers needed
Handouts (training manual, page 92 - 99)	one per participant
Visual presentation(slides 160 - 174)	one per trainer
Television sets	one per group of three or four participants
Video cameras	one per group of three or four participants

7.1 Monitoring Cooperative Learning Groups

To monitor means to check continuously. Monitoring has four stages:

1) Prepare for observing the learning groups by deciding who will be observers, what observation form to use, and training the observers.
2) Observe to assess the quality of cooperative efforts in the learning groups.
3) Intervene when it is necessary to improve a group's task work or teamwork.
4) Have students assess the quality of their own individual participation in the learning groups to encourage self-monitoring (adapted from Johnson et al., 1994, 11:1).

Your primary responsibility while monitoring is to watch, listen, and think about what you see. You decide when to intervene. Monitoring is the time to find out what your students do and do not understand and how skillful they are in working together (taken from Johnson et al., 1998).

Guidelines for monitoring

<u>Round One</u>:
Check if students are working together.
Assure that:
(1) students are seated close together
(2) students are on the right page
(3) previously absent students have been welcomed back and brought up to date
(4) students have brought work to the group, if they have been asked to do so

<u>Round Two</u>:
Check if students are doing their work well.
(1) Give feedback on the work.
(2) Reteach anything misunderstood.
(3) Praise good efforts.
(4) Watch how individual students learn and interact.
(5) Reteach or practice more if needed.

<u>Round three</u>:
Formally observe, give feedback, and process.
(1) Take an observation sheet, pick a group and gather data.
(2) Check over the work and quiz individual members if the groups are finished.
(3) Structure small group or whole class processing.

(adapted from Johnson et al., 1998, pp. 6:26-6:28)

7.2 Intervening in Cooperative Learning Groups

Cooperative learning groups:

- give you a "window into students' minds" (revealing covert cognitive processes that have become overt) and
- provide you with a picture of students' social skills.

You intervene for two reasons:

- To help students learn, improve, and refine their teamwork and task work skills when a) they do not have the necessary skills to be effective or b) there are disruptive and ineffective patterns in interaction among group members.
- To catch students in the act of using the target skills in effective ways so their skillful actions can be recognized and celebrated (taken from Johnson et al., 1998, 6:17).

Guidelines for Intervening

(1) Intervene only when it is absolutely needed!

(2) Intervene at eye level!

(3) Have the whole group focus on you while you are intervening! ("Pencils down, close your books, look at me!")

(4) Label actions, not students!

(5) Focus on "here and now"!

(6) Have students solve a problem – do **not** tell them what to do!
To do so, you can:
(a) point out the problem by showing the data you collected by observing ("Here is what I observed."). Ask the students to identify the problem and plan how to correct it.
(b) point out the problem by asking questions ("Why has Merry made only two comments in the past 20 minutes?")
(c) focus members on their reasoning process by asking: 1. "What are you doing?", 2. "Why are you doing it?", 3. "How will it help you?"
(d) have students role play the situation and practice new behaviors that would solve the problem.
(e) ask group members to create three possible solutions ("What are three plans for solving the problem?") and ask them which solution they are going to try first ("Which plan will you implement first?").
(f) If the group members cannot identify a clear procedure, suggest several strategies to choose from to empower students.

(7)Tell students to go back to work.

(taken from Johnson et al., 1998, p. 6:14; p. 6:18)

7.3 Simulation I: Intervening in CLL groups

Below you will find descriptions of different situations in the cooperative learning classroom and instructions for appropriate teacher behavior.

Please indicate the degree of difficulty on a scale from 0 (not difficult) to 100 (very difficult).

Situation	Instruction	Degree of Difficulty
The students are working in groups of three and have been assigned different roles. While observing a group you notice that student M talks all the time and the other group members just follow along.	Smile and take a seat next to the group. Ask the group members to close their books, lay down their pencils, and to look at you. Look at the students and inform them of what you have noticed. Find out which roles they have been assigned to do. Ask student M to be the accuracy checker. Tell the group to open their books and to get back to work.	
The students of one group are working like "busy bees". All of them have the right materials and are on the right page.	Crouch down beside the student's desk. Smile, nod and say: "Good group! Keep up the good work!"	
The groups have just started with the task. After a while you observe that one group has stopped completing the task. Instead of working they call each other names.	Smile and crouch down beside the students' desk. Ask the group members to close their books, lay down their pencils, and to look at you. Establish eye contact and ask the students to tell you what is wrong in the way the group is working. In order to do so, use the three standard questions: (1) "What are you doing?" (2) "Why are you doing it?" (3) "How will it help you?" Ask them to make a plan to solve the problem. Tell them that you will come back later to see if the plan is working. Tell the group to open their books and to get back to work.	
The social skill of the day is encouraging participation. The students are working in heterogeneous groups of three. Student E and student L encourage student A, who has not made any contributions so far, to participate in the discussion.	Crouch down beside the student's desk. Smile, nod and say: "Good encouraging!"	

(adapted from Hinsch & Pfingsten, 2007, pp. 144-146)

Instructions for Intervening

Before the situation

Keep in mind:

- Define your goal.
- Give yourself positive instructions (e.g. “I can do it!”)
- Decide if you are going to intervene.
- Decide how to intervene effectively.
- You want to highlight the problem for the group to solve and guide members to a solution that they themselves discover and implement.

In the situation

Keep in mind:

- Be a facilitator of learning - have students solve the problem.
- Intervene at eye level and have the whole group focus on you.
- Be friendly and respectful (smile, use open gestures, have eye contact).
- Be precise (label actions, not students and focus on “here and now“).

After the situation

Keep in mind:

- Praise yourself for the things you did well while intervening.

Keep in mind:

Only intervene when it is absolutely needed!

(adapted from Hinsch & Pfingsten, 2007, p. 157)

Implementing cooperative learning in your classroom is not easy, but it is worth the effort!

7.4 Group Processing: Giving and Receiving Feedback

Feedback is information on actual performance that individuals compare with criteria for ideal performance (taken from Johnson et al., 1994, p. 14:3).

Guidelines for giving positive feedback

(1) Focus feedback on behavior (not on personality traits).

(2) Be descriptive (not judgmental).

(3) Be specific and concrete (not general and abstract).

(4) Make feedback immediate (not delayed).

(5) Focus on positive actions (not negative ones).

(6) Present feedback in a visual (such as a graph or chart) as well as auditory fashion (not just spoken words alone).

(taken from Johnson et al., 1994, p. 14:2 f.)

7.5 Simulation II: Conducting Group Processing

Below you will find descriptions of different situations in the cooperative learning classroom and instructions for appropriate teacher behavior.

Please indicate the degree of difficulty on a scale from 0 (not difficult) to 100 (very difficult).

Situation	Instruction	Degree of difficulty
You guide group processing in one of your English classes for the first time.	Look at the students, smile, have eye contact, wait until they look at you. Instruct your students to reflect on the group process by telling each group member what they have appreciated when working together. Remind them to focus on one group member at a time and to provide positive feedback.	
You guide group processing in one of your English classes for the first time.	Look at the students, smile, have eye contact, wait until they look at you. Ask your students to write a positive comment about each member's participation on an index card and then to give their written comments to each other. Remind them to give positive feedback.	
You guide group processing in one of your English classes for the first time.	Look at the students, smile, have eye contact, wait until they look at you.	
You guide group processing in one of your English classes for the first time.	Look at the students, smile, have eye contact, wait until they look at you.	
You have observed your students with an observation form. You present the data.	Look at the students, smile, have eye contact, wait until they look at you. You show them the data and ask them to reach their own conclusion about their participation.	
You guide small group processing for the first time in one of your English classes.	Give your students 30 seconds to identify three things other members did to help others learn. Remind them to give positive feedback.	

(adapted from Hinsch & Pfingsten, 2007, pp. 144-146)

Instructions for Group Processing

BEFORE the situation

- Define your goal.
- Give yourself positive instructions (e.g. “I can do it!”)

IN the situation

- Speak loud enough so that all students can hear you.
- Use short sentences.
- Use “easy” vocabulary.
- Be precise.
- Be friendly and respectful (smile, use open gestures, have eye contact).
- Check if your students have understood the group processing procedure.

AFTER the situation

- Praise yourself for anything you did well while guiding group processing.

Keep in mind:

Give feedback in a helpful, non-threatening way!

(adapted from Hinsch & Pfingsten, 2007, p. 157)

7.6 Base Group Meeting: Cooperative Language Learning Contract

Cooperative Language Learning Contract

Write down major aspects of what you have learned from participating in training session six. Then write down how you plan to implement each aspect. Share what you have learned and your implementation plans with your base group. Listen carefully to their major aspects and implementation plans. You may modify your own plans on the basis of what you have learned from your group mates. Volunteer one thing you can do to help each group mate with his or her implementation plans. Utilize the help group mates offer you. Sign each member's plans to seal the contract.

Major Learning	**Implementation Plans**

Date: _____

Participant's Signature: _____

Signatures of base group members: _____

_____

(taken from Johnson et al., 1998, p. 1:22)

8 References

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Teacher Training for Cooperative Language Learning

Welcome!

Pretest

The purpose of this survey is to find out more about …

- what you think about cooperative (language) learning.
- essential conditions for its use in the EFL classroom.

Training Objectives

Participants are to get to know:

- **what** cooperative language learning (CLL) is and what makes it work.
- **why** CLL should be used in the English as a Foreign Language (EFL) classroom.
- **how** to use CLL in the EFL classroom.

Instructional Procedures

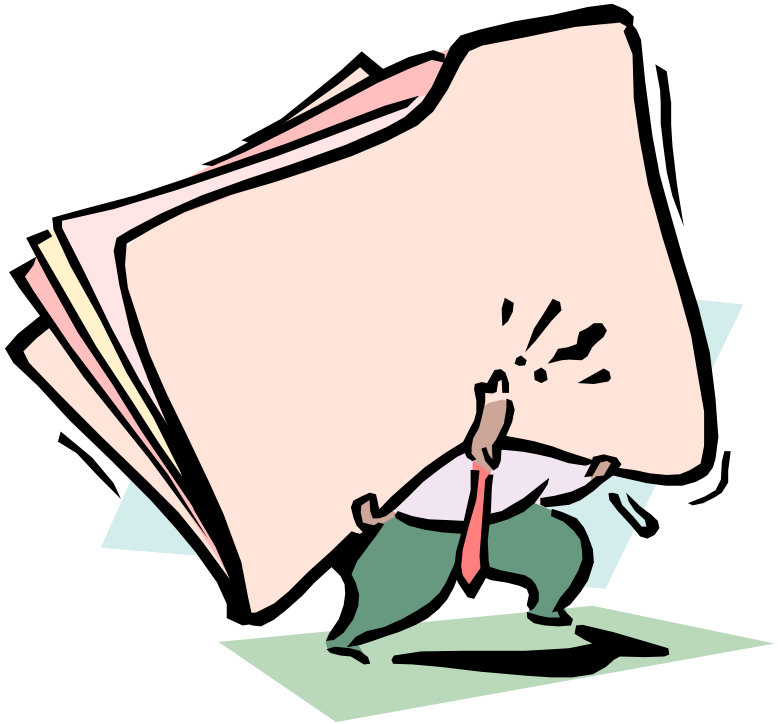
(adapted from Johnson, Johnson, & Holubec, 2002)

- Review
- Warm-up
- Introduction
- Exercise or Simulation
  - Analysis of Experiences
  - Integration of Theory and Research
- Transfer to the EFL Classroom
- Implementation Assignment (“Homework”)
- Conclusion and Closure

Training Requirements

- Attend the training sessions.
- Be prepared for and actively involved in all the training activities.
- Do all the between-session assignments.
- Meet weekly with a colleague to share ideas, plan lessons, and solve problems.

Any Questions?



Warm-up

What are your experiences with team-based methods?

Warm-up

(adapted from Johnson et al., 2002)

Task: **Reflect on your experiences with team-based methods.**

a pleasant experience (as a group member)	an unpleasant experience (as a group member)
Gesa	
an unpleasant experience (as a teacher)	a pleasant experience (as a teacher)

Warm-up

(adapted from Johnson et al., 2002)

Cooperation: Meet as many participants as possible, but only one at a time.

Criteria for success: Everyone must be able to name his or her experiences as well as others' experiences.

Individual Accountability: Instructor will randomly choose a participant to present the experiences.

Expected Behaviors: Active discussions by all participants.

Warm-up

You have 15 minutes to complete the task!

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this/these method(s) be used in the EFL classroom?

Think-Pair-Share

(Kagan & Kagan, 1994)

- Thinking to oneself on a topic.
- Pairing and sharing ideas with another person.
- Sharing ideas with the whole class.

Cooperative learning is …

"[...] the instructional use of small groups so that students work together to maximize their own and each other's learning" (Johnson & Johnson, 1999, p. 5).

The Five Basic Elements of CLL

(adapted from Johnson et al., 2002)

What are the differences between cooperative (language) learning and traditional group work?

The Five Basic Elements of CLL

(adapted from Johnson et al., 2002)

Task: **Learn the five basic elements of a well-structured cooperative lesson.**

Procedure: **For each element:**

- **Read** the paragraph defining it.
- **Summarize** the definition, create your own definition, and write it down (see worksheet).
- **Write down** at least one strategy **I (the instructor) used** to ensure that the basic element was structured in **this** exercise (see worksheet).

The Five Basic Elements of CLL

(taken from Johnson et al., 2002)

Cooperation: One set of answers from the three of you, everyone agrees, and everyone can explain.

To assist in doing so, each member must take one of the following roles:

- **Reader**
- **Recorder**
- **Checker**

The Five Basic Elements of CLL

(taken from Johnson et al., 2002)

Criteria for success: Everyone must be able to name and explain all five basic elements.

Individual Accountability: Instructor will randomly choose a member from your group to name and explain the five basic elements.

Expected Behaviors: Active participation and checking for understanding by all group members.

The Five Basic Elements of CLL

You have 30 minutes to complete the task!

What makes Cooperative Language Learning work?

The five basic elements

- Positive Interdependence
- Individual Accountability
- Face-to-face Promotive Interaction
- Interpersonal and Small Group Skills
- Group Processing

Cooperative language learning is …

- well-structured
- academic and social skills are conveyed (as well as intercultural competence)

Group Processing

(taken from Johnson et al., 2002)

- Name three things your group did well in working together.
- Name one thing your group could do even better next time.

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this/these method(s) be used in the EFL classroom?

Reading Comprehension Triads

(Johnson, Johnson, & Holubec, 1998)

- Students read material together and answer questions.
- One person is the **Reader**, another the **Recorder**, and the third the **Checker**.
- They must come up with three possible answers to each question and circle their favorite one.
- When finished, they sign the paper to certify that they all understand and agree on the answers.

Base Group Meeting

(taken from Johnson et al., 2002)

Task: Create a group folder.

- **In three minutes:** Find as many things as you can that all of you have in common.
- Create a team name and logo. Draw it onto your group folder along with your names. Each member must contribute to the drawing.
- Select a **MATERIALS-Manager** to collect and return the folder each session.

Conclusion and Closure

- difference between cooperative language learning and traditional group work
- Think-Pair-Share
- Reading Comprehension Triads

“Homework”

- Complete the **cooperative language learning contract**.
- Find a partner who you can meet once a week to discuss your CLL use in the EFL classroom.
- Use one of the CLL techniques you experienced today in your EFL classes.
- Read the additional materials in your handout.

Evaluation Form

- Complete the evaluation form.
  - How interested have you been in the content of the session?
  - How useful was what you have learned for your implementation of cooperative language learning in the EFL classroom?

References

- Johnson, D.W. & Johnson, R.T. (1999). *Learning together: cooperative, competitive, and individualistic learning*. 5th ed. Needham Heights, MA: Allyn and Bacon.
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Good bye!

Teacher Training For Cooperative Language Learning

Good afternoon!

Base Group Meeting

(adapted from Johnson, Johnson, & Holubec, 2002)

- Meet in your base groups.
- Welcome your base group members.
- Pick up your group folder.
- Complete the **Data Summary Chart**.
- Share what you remember from the last session.
- **You have 10** minutes!

Revision

- differences between traditional group work and cooperative language learning
- the five basic elements of cooperative language learning
- Think-Pair-Share
- Reading Comprehension Triads

Warm-up

Cooperative Language Learning in the English as a Foreign Language Classroom will never work!!!

Warm-up

Task: Give reasons for the use of CLL in the EFL classroom.

- **Write down** your answers in your corner on the placemat. **Work alone! Don‘t talk!**
- **Discuss** your answers with your group members.
- **Write down** the group‘s answers in the center of your placemat.

Warm-up

Cooperation: One set of answers from the group. Everyone must agree. Everyone must be able to explain the group‘s answers.

Criteria for success: Acceptable answers to the task.

Individual accountability: One member will be randomly picked to present the group‘s answers.

Expected Behavior: Active participation by all group members and checking for understanding.

Warm-up

Intergroup Cooperation: When you have completed the task compare your answers with those of another group and discuss.

Warm-up

You have **15** minutes to complete the task.

Individuals	**5** minutes
Groups	**5** minutes
Intergroup Cooperation	**5** minutes

Structuring interaction

(adapted from Johnson et al., 2002)

Goal Structures (Interdependence)

- **Competition**
- **Individual**
- **Cooperation**

Interaction Patterns

Outcomes

Competitive Learning

(adapted from Johnson et al., 2002)

- individual goals
- norm-referenced evaluation (i.e., comparative)
- winners are rewarded

Individualistic Learning

(adapted from Johnson et al., 2002)

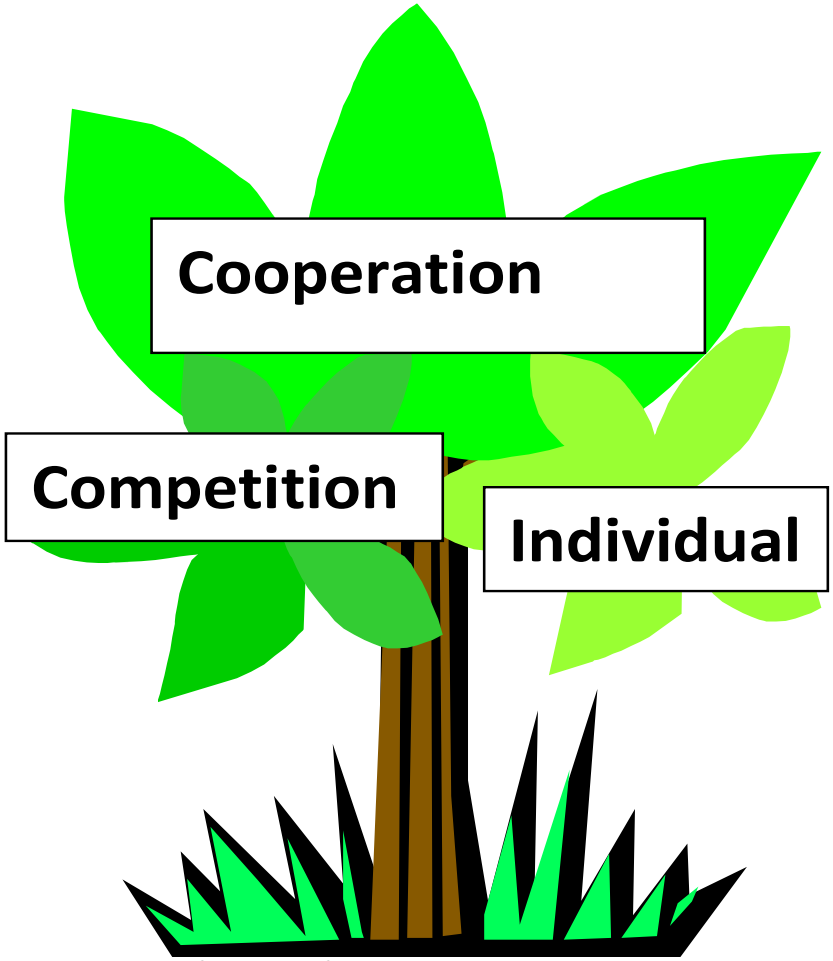
- individual goals
- criteria-referenced evaluation
- rewarded for own product

Cooperative Learning

(adapted from Johnson et al., 2002)

- group goal
- criteria-referenced evaluation
- rewarded for group product

Integration of the Three Goal Structures (adapted from Johnson et al., 2002)



Cooperative Language Learning can promote:

- academic achievement
- retention
- social skills
- critical thinking skills
- student satisfaction
- student-student interaction
- students‘ self-efficacy
- students‘ motivation

Cooperative language learning offers …

more opportunity for language development and for integrating language with content through:

- increased active communication,
- increased complexity of communication, and
- use of language for academic and social functions

(Olsen & Kagan, 1992, p. 5).

Group Processing

- Think of one thing each group member did to improve the group effectiveness.
- Tell them what it was!

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this/these method(s) be used in the EFL classroom?

Placemat

(cf. Weidner, 2006)

- Students work individually on a topic and write down their ideas on the placemat.
- Students share their ideas with the other group members.
- Students write down the group's results in the centre of the placemat.

The Cooperative Language Learning Approach

Task: Learn the material on the **Cooperative Language Learning Approach**.

- What are the **basic assumptions** of the approach?
- What is the underlying **theory of language**?
- What is the underlying **theory of learning**?

The Cooperative Language Learning Approach (adapted from Johnson et al., 2002)

Cooperation: Ensure that all group members master the material.

Criteria for success: 95 percent mastery by all members is very good.

Individual accountability: One member will be randomly selected to present the material for the group.

The Cooperative Language Learning Approach (taken from Johnson et al., 2002)

Expectations:

- ☐ Everyone teaches area of expertise.
- ☐ Everyone learns others‘ areas of expertise.
- ☐ Everyone summarizes and synthesizes.

The Cooperative Language Learning Approach (adapted from Johnson et al., 2002)

Keep track of the time!!!

1. Cooperative Triads	**5** minutes
2. Preparation Pairs	**15** minutes
3. Practice-Sharing-Pairs	**10** minutes
4. Cooperative Triads	**15** minutes
5. Whole Class Discussion	**10** minutes

Additional Instructions

(taken from Johnson et al. 2002)

Tasks:

- ☐ master material
- ☐ plan how to teach material

Preparation:

- ☐ underlines, questions, suggestions
- ☐ Compile major ideas.
- ☐ Prepare visual aids.
- ☐ Devise specific learning strategies.

Additional Instructions

(taken from Johnson et al., 2002)

Presentation:

- ☐ Encourage oral rehearsal.
- ☐ Encourage elaboration and integration.
- ☐ Encourage utilization.

The Cooperative Language Learning Approach

- Basic assumptions
- Theory of language
- Theory of learning

Group Processing

(adapted from Johnson, Johnson, & Holubec, 1998)

- Think of something that each group member did to improve the group effectiveness. Tell them what it was.

  - *I liked it when you …*
  - *I enjoyed it when you …*
  - *You really helped out the group when …*

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this/these method(s) be used in the EFL classroom?

Jigsaw Procedure

(Johnson, et al., 1998)

- Each student on the team becomes an “expert” on one topic by working with members from other teams assigned to corresponding expert topics.
- Upon returning to their teams, each one in turn teaches the group.
- Students are assessed on all aspects of the topic.

Jigsaw Procedure

(adapted from Johnson et al., 1998, 2002)

Jigsaw procedure:

1. Cooperative Triads	5 minutes
2. Preparation Pairs	15 minutes
3. Practice-Sharing-Pairs	10 minutes
4. Cooperative Triads	15 minutes
5. Whole Class Discussion	10 minutes

Base Group Meeting

(adapted from Johnson et al., 2002)

- Review the research evidence and write a rationale statement for the use of CLL in the EFL classroom.
- Share what you have learned in this session.
- Share how you will implement what you have learned in the EFL classroom (see **Cooperative Language Learning Contract**).

Conclusion and Closure

- research on cooperative (language) learning
- theoretical roots of cooperative language learning
- Placemat
- Jigsaw

“Homework”

- Present the rationale statement to another person (e.g., parent, administrator, colleague, or student).
- Use the Placemat technique in your EFL classes.
- Read the additional materials in your handout.
- Bring an old lesson plan or lesson planning material to the next training session.

Evaluation Form

- Complete the evaluation form.
  - How interested have you been in the content of the session?
  - How useful was what you have learned for your implementation of cooperative language learning in the EFL classroom?

References

- Johnson, D.W., Johnson, R.T., & Holubec, E. (1998), *Cooperation in the classroom*. 7th ed. Edina, MN: Interaction Book Company.
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Teacher Training For Cooperative Language Learning

Have a nice evening!

Teacher Training For Cooperative Language Learning

Welcome!

Base Group Meeting

(adapted from Johnson, Johnson, & Holubec, 2002)

- Meet in your base groups.
- Welcome your base group members.
- Pick up your group folder.
- Complete the **Data Summary Chart**.
- Share what you remember from the last session.
- **You have 10** minutes!

Revision

- differences between traditional group work and cooperative language learning
- research support
- the cooperative language learning approach
- Placemat
- Jigsaw

Warm-up

How well do you know the English grammar?

Warm-up

Task: **Correct the mistakes in the sentences on page 37 in your handout.**

Cooperation: Working in pairs, read each of the sentences, correct it, and write down your answer.

Criteria for Success: Correct answers by all group members.

Individual Accountability: One member will be randomly picked to present the group's answers.

Warm-up

Procedure:

1. Person A answers the first statement, person B is the coach.
2. Person B checks if person A's answer is correct and praises A for a right answer.
3. The roles are reversed after every statement and the procedure is repeated.
4. After every second sentence, the answers are compared with those of another group.

Warm-up

Expected behavior: Encouraging/Praising

Intergroup cooperation: Compare your answers with those of another group.

Group Processing

(adapted from Johnson et al., 2002)

- Tell your partners how much you appreciated their help.
  - *I appreciated it when you …*
  - *I admired your ability to …*

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this/these method(s) be used in the EFL classroom?

Pairs Check

(Kagan & Kagan, 1994)

- Students work in pairs within groups of four.
- Within pairs students alternate – one solves the problem while the other coaches.
- After every second problem, the two pairs compare their answers.

Lesson Planning - Making Decisions

(adapted from Johnson et al., 2002)

- ☐ Lesson content
- ☐ CLL method
- ☐ Group size
- ☐ Assignment to groups
- ☐ Materials
- ☐ Roles
- ☐ Room arrangement
- ☐ Evaluation of achievement and group effectiveness

The Structure of a CLL lesson

(Johnson & Johnson, 1999)

- Base group meeting: review
- Warm-up
- Introduction to the lesson
- Exercise
- Group processing
- Base group meeting

Lesson Planning –
Academic Lesson Plans

Lesson Planning

(taken from Johnson et al., 2002)

Task: Plan a lesson and practice presenting it.

Choose something routine ...what about …

- spelling?
- editing a paragraph?
- introducing a new topic?

Lesson Planning

Cooperation:

One lesson plan from each pair with both knowing how to conduct the lesson.

During the second part of the exercise, each group member must take one of the following roles:

- **Explainer**: explains the lesson plan to the other participants
- **Checker**: Listens carefully to the explainer, may provide new ideas, and gives positive feedback.

Lesson Planning

5. When you have finished the exercise, your lesson plans will be put up in different areas of the room so that everyone can read them.
6. One member of each group presents the group's lesson plan to the other participants while the other reviews the lesson plans of the other participants.
7. Change roles after one "round".
8. Discuss the other lesson plans with the participants and provide positive feedback.

Lesson Planning

Expected criteria for success:

Both must be able to present the lesson plan.

Individual accountability:

Both must present the lesson plan to the other participants and the instructor.

Expected behavior:

Active participation by both members and checking for understanding.

Providing Positive Feedback

(adapted from Johnson et al., 2002)

- Name at least one thing you liked about the lesson plan.
- Name one thing that could be done even better next time.

You have **60** minutes to complete the task.

Lesson Planning	**30** minutes
Presentation	**30** minutes

Group Processing

- Give reasons for the success of your group.

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this/these method(s) be used in the EFL classroom?

Gallery Walk

(cf. Weidner, 2006)

- Gallery Walk is used to evaluate group products and to gain the highest amount of total results for the students.
- The steps are:
  - The group products are put up in different areas of the classroom.
  - The learners walk from “station to station” and read and discuss the results.
  - Then they provide positive feedback.

Base Group Meeting

- Share what you have learned in this session.
- Share how you will implement what you have learned in the EFL classroom (see **Cooperative Language Learning Contract**).

Conclusion and Closure

- Planning an academic lesson
- Pairs Check
- Gallery Walk

“Homework”

- Use Pairs Check or Gallery Walk in your EFL classes.
- Read the additional materials in your handout.

Evaluation Form

- Complete the evaluation form.
  - How interested have you been in the content of the session?
  - How useful was what you have learned for your implementation of cooperative language learning in the EFL classroom?

References

- Johnson, D.W. & Johnson, R.T. (1999). *Learning together: cooperative, competitive, and individualistic learning*. 5th ed. Needham Heights, MA: Allyn and Bacon.
- Johnson, D.W., Johnson, R.T., & Holubec, E. (2002). *Cooperation in the classroom: Trainer's manual*. Edina, MN: Interaction Book Company.
- Kagan, S. & Kagan, M. (1994). The structural approach: Six keys to cooperative learning. In: S. Sharan (Ed.), *Handbook of cooperative learning methods*. Westport, CT: Greenwood Press.
- Weidner, M. (2006). *Kooperatives Lernen im Unterricht. Das Arbeitsbuch [Cooperative learning in class. The Manual]*. 3rd ed. Seelze-Velber: Kallmeyersche Verlagsbuchhandlung GmbH.

Teacher Training for Cooperative Language Learning

Have a nice evening!

Teacher Training for Cooperative Language Learning

Good afternoon!

Base Group Meeting

(adapted from Johnson, Johnson, & Holubec, 2002)

- Meet in your base groups.
- Welcome your base group members.
- Pick up your group folder.
- Complete the **Data Summary Chart**.
- Share what you remember from the last session.
- **You have 10** minutes!

Revision

- Guidelines for planning an academic CLL lesson
- Pairs Check
- Gallery Walk

Guidelines for Lesson Planning

(adapted from Johnson et al., 2002)

- task
- cooperative learning method
- group size
- group composition
- roles
- arrangement of the room
- materials
- evaluation of achievement and group processes

Warm-up

Task: **Name skills students need to work in cooperative learning groups in the EFL classroom.**

Procedure:

1. Form two circles (an inner and an outer circle).
2. Find a partner.
3. Discuss the issue.
4. Find another partner (i.e., the outer circle moves two partners to the right side).

Warm-up

Cooperation: Everyone must be able to name three skills students need.

Criteria for Success: Acceptable answers to the task.

Individual accountability: One person will be randomly picked to present his/her answers.

Expected Behavior: Checking for understanding

Warm-up

You have **10** minutes to complete the task.

Academic and/or Social Skills!

communication skills – cooperative group skills

(linguistic functions) - (social skills)

For example:

- paraphrasing/summarizing
- asking for explanation
- explaining
- clarifying
- reporting facts (cf. Coelho, 1992)

Group Processing

(adapted from Johnson et al., 2002)

- Rate yourself from 1 (low) to 10 (high) on **‘Checking for understanding‘.**
- Share your rating with your last partner and explain why you rated yourself the way you did.
- Plan how to increase the frequency with which you and your partner use this skill.

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this/these method(s) be used in the EFL classroom?

Inside-Outside-Circle

(Kagan & Kagan, 1994)

- Students form two circles: an **inner** and an **outer** circle.
- Students are asked to find a partner.
- A task or problem is presented.
- Students discuss the issue.
- After a few minutes the students are asked to find another partner (e.g., “The outer circle moves two partners to the right!“).

Social Language Skills

Imagine you are working in groups in an English class. Peter is one of your group members. He is not participating in the group discussion.

What can you say or do?

Social Language Skills

Task: Act out the situation.

Cooperation: Each member must take one of the following roles:

- Peter – number 1
- Student A – number 2
- Student B – number 3

Skill of the day:

Encouraging participation

3 responsibilities:

Make sure that **you** encourage participation, **your group members** encourage participation and **all participants of the class** encourage participation.

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this/these method(s) be used in the EFL classroom?

Teaching Social Skills

(Johnson, Johnson, & Holubec, 1998)

- understand the need of the skill
- have a clear understanding of how to engage in the skill
- practice the skill in meaningful situations
- receive feedback on how well the skill is performed
- practice the skill until it is integrated and automatic

Lesson Planning –
Social Language Skills Lesson Plans

Lesson Planning

(adapted from Johnson et al., 1998, 2002)

Task: Plan a social language skills lesson.

1. Select a social skill and write it down.
2. Decide how your students will see the need of the skill.
3. Specify how you will help your students to understand what the skill is and when it should be used.
4. Fill out a T-Chart.
5. Plan how you will ensure that your students practice the skill.

Lesson Planning

Cooperation: One lesson plan from each pair with both knowing how to conduct the lesson.

During the second part of the exercise, each group member must take one of the following roles:

- **Explainer**: Explains the lesson plan to the other participants.
- **Checker**: Listens carefully to the explainer, may provide new ideas, and gives positive feedback.

Lesson Planning

5. When you have finished the exercise, your lesson plans will be put up in different areas of the room so that everyone can read them.
6. One member of each group presents the group's lesson plan to the other participants, while the other reviews the lesson plans of the other participants.
7. Change roles after one "round".
8. Discuss the other lesson plans with the participants and provide positive feedback.

Lesson Planning

Criteria of success:

Both must be able to present the lesson plan.

Individual accountability:

Both must present the lesson plan to the other participants and the instructor.

Expected behavior:

Active participation by both members and checking for understanding.

Providing Positive Feedback

(adapted from Johnson et al., 2002)

- Name at least one thing you liked about the lesson plan.
- Name one thing that could be done even better next time.

Group Processing

(adapted from Johnson et al., 1998)

- Name at least two aspects your partner was good at. “You were especially good at:
  - listening to me.
  - providing me with support and encouragement.
  - helping me.
  - contributing ideas.
  - practicing with me.
  - caring about success.
  - bringing a positive attitude to our teamwork.“

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this/these method(s) be used in the EFL classroom?

Gallery Walk

(cf. Weidner, 2006)

- Gallery Walk is used to evaluate group products and to gain the highest amount of total results for the students.
- The steps are:
  - The group products are put up in different areas of the classroom.
  - The learners walk from “station to station” and read and discuss the results.
  - Then they provide positive feedback.

Warm-up

(adapted from Johnson, Johnson, & Holubec, 1992)

Task: **Decide for each statement on page 62 in your handout whether it is a description or a judgement.**

Cooperation: Working in triads, read each of the statements listed on page 62 and write down your answers.

Put a “D” for each statement that describes a person’s behavior and a “J” for each statement that judges a person’s behavior.

Warm-up

(adapted from Johnson et al., 2002)

Person C is the observer.

Observer instructions:

- List names of members above each column of the observation sheet.
- Place a tally mark in the appropriate box whenever a member uses the skills you are observing for (encouraging and praising).
- Total the column and row totals when the exercise is over.

Warm-up:

Criteria for success:

Correct answers by all group members.

Individual accountability: One participant will be randomly picked to present the answers.

Expected behavior: “Encouraging” and “Praising”

Intergroup Cooperation: Comparing answers with those of another group.

Warm-up

(taken from Johnson et al., 2002)

Observer instructions:

- Total columns and rows.
- Show data to the group.
- Ask what they conclude about: 1) their participation and 2) the group's functioning.
- Make sure that each member receives positive, specific feedback.
- Ask them to set a goal for being even better tomorrow.

Whole Class Processing

- Instructor's observations and feedback (total frequency of target skill and other observations)
- Summary of group's observations (total frequency of target skill and other observations)

Reflection

- What did we do?
- With regard to your usual classroom instruction:
  - what was similar?
  - what was different?
- For which purposes can this/these method(s) be used in the EFL classroom?

Pairs Check

(Kagan & Kagan, 1994)

- Students work in pairs within groups of four.
- Within pairs students alternate – one solves the problem while the other coaches.
- After every second problem, the two pairs compare their answers.

Lesson Planning – Structured Observation

Lesson Planning

(adapted from Johnson et al., 1998, 2002)

Task: Construct an observation form.

1. Select actions to observe.
2. Construct an (age appropriate) observation form or unstructured procedure to record the frequencies of targeted actions.
3. Decide who will observe.
4. Plan a route through the classroom by constructing a sampling plan.

Lesson Planning

Cooperation: One observation form from each pair.

Criteria of success: Both must be able to present the observation form.

Individual accountability: Observation forms are handed to the instructor.

Expected behavior: Active participation by both members.

Lesson Planning

Cooperation: One observation form from each pair. During the second part of the exercise, each group member must take one of the following roles:

1. Explainer: Explains the observation form to the other participants of the class.

2.Checker: Listens carefully to the Explainer, may provide new ideas, and provides positive feedback.

Lesson Planning

- When you have finished the exercise, your observation forms will be put up in different areas of the room so that everyone can read them.
- One member of each group presents the group's observation form to the other participants, while the other reviews the observations forms of the other participants.
- Change roles after one "round".
- Discuss the other observation forms with the participants and provide positive feedback.

Lesson Planning

Expected criteria for success: Both must be able to present the observation form.

Individual accountability: Both must present the observation form to the other participants of the class and the instructor.

Expected behavior: Active participation by both members and checking for understanding.

Providing Positive Feedback

(adapted from Johnson et al., 2002)

- Name at least one thing you liked about the lesson plan.
- Name one thing that could be done even better next time.

Group Processing

(adapted from Johnson et al., 1998)

- Tell your partners how much you appreciated their help.
  - *I appreciated it when you …*
  - *I admired your ability to …*

Base Group Meeting

- Meet in your base groups.
- Write down what you like about working with your base group members on an index card.
  - *I like about you/working with you …*
- Give the index cards to your base group members.
- Think about one aspect each group member could do to improve the group effectiveness. Tell them what it is.

Group Processing

(cf. Johnson et al., 1998)

- Each student needs to receive positive and concrete feedback.
- Students need to analyze and reflect on the feedback.
- Students need to set improvement goals.
- Students need to celebrate their success.

Lesson Planning –

Group Processing

Lesson Planning

Task: Plan group processing.

1. Decide how each students will receive positive feedback.
2. Decide how they will set improvement goals.
3. Decide how your students will celebrate their success.

Lesson Planning

Cooperation: One lesson plan from each pair with both knowing how to conduct group processing. During the second part of the exercise, each group member must take one of the following roles:

- **Explainer**: Explains the lesson plan to the other participants.
- **Checker**: Listens carefully to the explainer, may provide new ideas, and gives positive feedback.

Lesson Planning

5. When you have finished the exercise, your group processing plans will be put up in different areas of the room so that everyone can read them.
6. One member of each group presents the group processing plan to the other participants, while the other reviews the lesson plans of the other participants.
7. Change roles after one “round”.
8. Discuss the other lesson plans with the participants and provide positive feedback.

Lesson Planning

Expected criteria for success: Both must be able to present the group processing plan.

Individual accountability:

Both must present the group processing plan to the other participants and the instructor.

Expected behavior: Active participation by both members and checking for understanding.

Providing Positive Feedback

(adapted from Johnson et al., 2002)

- Name at least one thing you liked about the lesson plan.
- Name one thing that could be done even better next time.

Group Processing

(adapted from Johnson et al., 1998)

- Tell your partners how much you appreciated their help.
  - *I appreciated it when you …*
  - *I admired your ability to …*

Base Group Meeting

- Share what you have learned in this session.
- Share how you will implement what you have learned in the EFL classroom (see **Cooperative Language Learning Contract**).

Conclusion and Closure

- teaching social skills
- observing students
- group processing
- Inside-Outside-Circle

“Homework”

- Use Inside-Outside-Circle or another CLL technique in your EFL classes.
- Teach a “social language skill lesson”.
- Conduct a structured observation and a group processing activity in your EFL classes.
- Read the additional materials in your handout.

Evaluation Form

- Complete the evaluation form.
  - How interested have you been in the content of the session?
  - How useful was what you have learned for your implementation of cooperative language learning in the EFL classroom?

References

- Coelho, E. (1992). Cooperative learning: Foundation for a communicative curriculum. In: C. Kessler (Ed.), *Cooperative language learning. A teacher's resource book* (pp. 31-49). Englewood Cliffs, NJ: Prentice Hall Regents.
- Johnson, D.W., Johnson, R.T., & Holubec, E. (1992). Advanced cooperative learning. Edina, MN: Interaction Book Company.
- Johnson, D.W., Johnson, R.T., & Holubec, E. (1998), *Cooperation in the classroom*. 7th ed. Edina, MN: Interaction Book Company.
- Johnson, D.W., Johnson, R.T., & Holubec, E. (2002). *Cooperation in the classroom: Trainer's manual*. Edina, MN: Interaction Book Company.
- Kagan, S. & Kagan, M. (1994). The structural approach: Six keys to cooperative learning. In: S. Sharan (Ed.), *Handbook of cooperative learning methods*. Westport, CT: Greenwood Press.
- Weidner, M. (2006). *Kooperatives Lernen im Unterricht. Das Arbeitsbuch [Cooperative learning in class. The manual]*. 3rd ed. Seelze-Velber: Kallmeyersche Verlagsbuchhandlung GmbH.

Teacher Training for Cooperative Language Learning

Have a nice evening!

Teacher Training for Cooperative Language Learning

Good afternoon!

Base Group Meeting

(adapted from Johnson, Johnson, & Holubec, 2002)

- Meet in your base groups.
- Welcome your base group members.
- Pick up your group folder.
- Complete the **Data Summary Chart**.
- Share what you remember from the last session.
- **You have 10** minutes!

Revision

- Teaching social skills
- Observing students
- Group processing
- Inside-Outside Circle

Warm-up

Task: **Complete the sentences on page 77.**

Role Plays: Procedure and Rules

(adapted from Hinsch & Pfingsten, 2007)

Task: Act out two of the situations.

Take one of the following roles:

Teacher:
1. Read the situation.
2. Rate the degree of difficulty.
3. Choose one situation (the easiest).
4. Describe the situation.
5. Name your resolutions (“I will ...”)

Role Plays: Procedure and Rules

(adapted from Hinsch & Pfingsten, 2007)

Student: 1. Start small.

2. Give in on time.

3. Don't insult the teacher.

Observer: Guide processing:

- Teacher: a) What did I do well? b) Things I could do better next time. c) Resolutions for next time
- Student/Observer: a) What did she/he do well?

  b) What could be done better next time?

Base Group Meeting

- Share what you have learned in this session.
- Share how you will implement what you have learned in the EFL classroom (see **Cooperative Language Learning Contract**).

Conclusion and Closure

- Explanatory Model of the Origin of Behavior
- Presenting a CLL task

“Homework”

- Write down three positive self-verbalizations.
- Use CLL (i.e., all five basic elements!) in your EFL classes as often as possible.
- Present a CLL task according to the guidelines.

Evaluation Form

- Complete the evaluation form.
  - How interested have you been in the content of the session?
  - How useful was what you have learned for your implementation of cooperative language learning in the EFL classroom?

References

- Hinsch, R. & Pfingsten, U. (2007). Gruppentraining sozialer Kompetenzen (GSK). Grundlagen, Durchführungen, Anwendungsbeispiele *[Group training of social competencies (GSK). Foundations, implementation, examples of use]*. 5th completely revised ed. Weinheim, Basel: Beltz Verlag.
- Johnson, D.W., Johnson, R.T., & Holubec, E. (2002). *Cooperation in the classroom: Trainer's manual*. Edina, MN: Interaction Book Company.

Teacher Training for Cooperative Language Learning

Have a nice evening!

Teacher Training for Cooperative Language Learning

Good afternoon!

Base Group Meeting

(adapted from Johnson, Johnson, & Holubec, 2002)

- Meet in your base groups.
- Welcome your base group members.
- Pick up your group folder.
- Complete the **Data Summary Chart**.
- Share what you remember from the last session.
- **You have 10** minutes!

Warm-up

Task: Present your positive self-verbalizations.

Role Plays: Procedure and Rules

(adapted from Hinsch & Pfingsten, 2007)

Task: Act out two of the situations.

Take one of the following roles:

Teacher:
1. Read the situation.
2. Rate the degree of difficulty.
3. Choose one situation (the easiest).
4. Describe the situation.
5. Name your resolutions (*I will* …)

Role Plays: Procedure and Rules

(adapted from Hinsch & Pfingsten, 2007)

Student: 1. Start small.

2. Give in on time.

3. Don't insult the teacher.

Observer: Guide processing:

- Teacher: a) What did I do well? b) Things I could do better next time. c) Resolutions for next time
- Student/Observer: a) What did she/he do well?

  b) What could be done even better next time?

Warm-up

(adapted from Hinsch & Pfingsten, 2007)

Task: Be an angle or a devil.

Procedure:

- Sit on a chair back to back.
- Come up with an issue in CLL use you can have two opposing positions on.
- The angle takes the positive position and the devil the negative.

Base Group Meeting

- Share what you have learned in this session.
- Share how you will implement what you have learned in the EFL classroom (see **Cooperative Language Learning Contract**).

Conclusion and Closure

- Intervening in groups
- Guiding group processing

“Homework”

- Use CLL (i.e., all five basic elements!) in your EFL classes as often as possible.
- Intervene in CLL groups and guide group processing according to the guidelines.

Evaluation Form

- Complete the evaluation form.
  - How interested have you been in the content of the session?
  - How useful was what you have learned for your implementation of cooperative language learning in the EFL classroom?

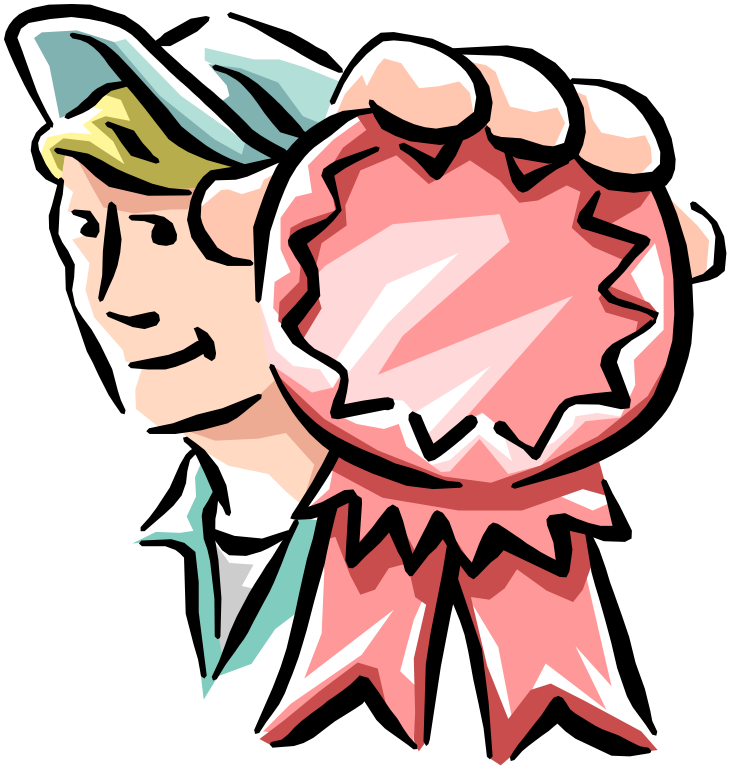
References

- Hinsch, R. & Pfingsten, U. (2007). Gruppentraining sozialer Kompetenzen (GSK). Grundlagen, Durchführungen, Anwendungsbeispiele *[Group training of social competencies (GSK). Foundations, implementation, examples of use].* 5th completely revised ed. Weinheim, Basel: Beltz Verlag.
- Johnson, D.W., Johnson, R.T., & Holubec, E. (2002). *Cooperation in the classroom: Trainer's manual*. Edina, MN: Interaction Book Company.

Evaluation of the Training

- one thing you liked
- one thing that could be done better next time

Conclusion and Closure of the Training



Congratulations to a super team!

You did a very good job!

Posttest

The purpose of this survey is to find out more about …

- what you think about cooperative (language) learning.
- essential conditions for its use in the EFL classroom.

Teacher Training For Cooperative Language Learning

Goodbye!

Appendix B4: Survey Instruments

Table of Contents

1 EFL Teacher Survey Instruments

1.1 Cover Letter

Liebe Lehrerin, lieber Lehrer,
in letzter Zeit hat die Popularität kooperativen Lernens im schulischen Kontext stark zugenommen. Der Einsatz dieser Lehr-Lernform variiert im schulischen Alltag jedoch sehr. Während einige Lehrkräfte kooperatives Lernen regelmäßig verwenden, setzen andere es aus verschiedenen Gründen seltener ein. Mit dieser Befragung wollen wir herausfinden, wie diese Unterschiede zustande kommen. Uns interessieren dabei vor allem zwei Aspekte: zum einen, was Sie persönlich von kooperativen Lehr-Lernformen halten und zum anderen, wie regelmäßig Sie diese Lehr-Lernformen in Ihrem Englischunterricht einsetzen.
Bitte lesen Sie die folgenden Fragen aufmerksam durch und beantworten Sie diese möglichst zügig und der Reihe nach. Da uns Ihre persönliche Meinung interessiert, gibt es keine richtigen oder falschen Antworten.
Die Angaben, die Sie im Rahmen dieser Untersuchung machen, werden ausschließlich für diesen Forschungszweck verwendet und streng vertraulich behandelt.

1.2 Code

Um Ihre Anonymität zu gewährleisten und gleichzeitig die Zuordnung der Daten bei weiteren Befragungen zu ermöglichen, verwenden wir statt Ihres Namens einen Code. Bitte geben Sie Ihren Code wie folgt an:

Item	Key
zweiter Buchstabe Ihres Geburtsorts (Beispiel: Peine = E) second letter of your place of birth (example: Peine = E)	❑
zweiter Buchstabe des Vornamens Ihrer Mutter (Beispiel: Lotte = O) second letter of your mother's first name (example: Lotte = O)	❑
erster Buchstabe Ihres Geburtsmonats (Beispiel: März = M) first letter of your month of birth (example: March = M)	❑
Ihr Geburtstag als Zahl (Beispiel: 1. Dezember = 01) your day of birth as a number (example: December 1 = 01)	❑❑

1.3 Socio-demographic Data

Bitte machen Sie zunächst einige Angaben zu Ihrer Person.

Item	Key
Geschlecht	❑ weiblich ❑ männlich
sex	❑ female ❑ male
Alter	__ Jahre
age	__ years
Schulform	❑ Grundschule ❑ Hauptschule ❑ Realschule ❑ Gymnasium ❑ Integrierte Gesamtschule ❑ Berufsschule ❑ sonstiges
school type	❑ Elementary School ❑ German “Hauptschule” ❑ German “Realschule” ❑ German “Gymnasium” ❑ German “Comprehensive School” ❑ Vocational School ❑ other
Klassenstufe	❑ 1. Jahrgang bis ❑ 13. Jahrgang
class level	❑ grade 1 to ❑ grade 13
Jahre im Schuldienst	__ Jahre
years of teaching experience	__ years
Beschäftigungsverhältnis	❑ Vollzeit ❑ Teilzeit
employment	❑ full-time ❑ part-time
Teilnahme an anderen Trainings zu kooperativem	❑ ja ❑ nein

Lernen	Falls ja, ❑ wann? ❑ wo? ❑ bei welchem Trainer? __ ❑ mit welchem zeitlichen Umfang?
previously attended cooperative learning trainings	❑ yes ❑ no If yes, ❑ when? ❑ where? ❑ with which trainer? __ ❑ with how much time spent in training?
Wie viele Stunden Englisch unterrichten Sie pro Woche?	__ Stunden
How many EFL hours do you teach per week?	__ hours
Haben Sie das Fach Englisch studiert?	❑ ja ❑ nein
Have you studied English?	❑ yes ❑ no
Falls ja, haben Sie das Fach Englisch als […] studiert?	❑ Hauptfach ❑ Neben- bzw. Erweiterungsfach
If yes, have you studied English as a/an …	❑ major subject ❑ minor or additional subject
Falls nein, welche Art von Qualifikation haben Sie?	_____ (genaue Bezeichnung)
If not, what kind of qualification do you have?	_____ (exact name)

1.4 Cognitions

1.4.1 CLL Conception

Item	Key
Bitte geben Sie eine Definition, was Sie unter kooperativem Lernen verstehen.	___
Please give a definition of your understanding of cooperative learning.	___

1.4.2 Intention to Use CLL in the EFL Classroom

Item	Key
Ich möchte in Zukunft […] kooperative Lehr-Lernformen in meinem Englischunterricht einsetzen.	❑ weniger ❑ soviel wie bisher ❑ mehr ❑ deutlich mehr
In the future I would to use cooperative learning procedures in my English classes […].	❑ less (often) ❑ as much as before ❑ more ❑ considerably more

1.4.3 Attitude toward CLL Use

Kooperatives Lernen lässt sich als seine besondere Form des Gruppenunterrichts charakterisieren, bei dem fachliche und soziale Lerninhalte gleichermaßen erarbeitet, geübt und reflektiert werden.
Im Folgenden möchten wir von Ihnen wissen, was Sie von dieser Lehr-Lernform halten.
Bitte geben Sie an, inwieweit Sie den folgenden Aussagen zustimmen. Kreuzen Sie dazu jeweils die Ziffer an, die Ihrer Meinung am ehesten entspricht.
Die Antwortmöglichkeiten sind:
① sehr unwahrscheinlich
② eher unwahrscheinlich
③ weder noch
④ eher wahrscheinlich
⑤ sehr wahrscheinlich

Würde ich kooperative Lehr-Lernformen in meinem Englischunterricht einsetzen, würde das …/My use of cooperative learning in my EFL classes would …

Item	Key
den Lernzuwachs der Schüler/innen erhöhen, weil die Schüler/innen in sozialen Situationen voneinander lernen.	① sehr unwahrscheinlich ② eher unwahrscheinlich ③ weder noch ④ eher wahrscheinlich ⑤ sehr wahrscheinlich
increase student learning because students learn from each other in social situations.	① very unlikely ② slightly unlikely ③ neither ④slightly likely ⑤ very likely
zu mehr Spaß und Interesse am Englischunterricht führen.	siehe oben
make English more fun and interesting.	see above
die Anzahl der Ideen und Problemlösestrategien erhöhen, die die Schüler/innen im Englischunterricht verwenden können.	siehe oben
increase the number of ideas and problem-solving techniques students could use in English.	see above
den Englischunterricht schülerzentrierte machen.	siehe oben
make English more student-directed.	see above

den Schüler/innen helfen, soziale Fähigkeiten (Führungsverhalten, Kompromissfähigkeit, Kommunikation, Austausch, Verantwortung, etc.) zu erlernen.	siehe oben
help students learn cooperative skills (leadership, compromise, communication, sharing, responsibility, etc.).	see above
dazu führen, dass einige Kinder den Englischunterricht dominieren und andere sich einfach „zurücklehnen“.	siehe oben
let some children dominate the English lessons and allow others just to follow along.	see above
schwierig sein, weil Kindern soziale Fertigkeiten fehlen.	siehe oben
be difficult because children lack social skills.	see above
problematisch sein, weil einige Schüler/innen nicht bei der Sache wären und es im Unterricht laut wäre.	siehe oben
be problematic because some students would be off-task and noisy.	see above
die Zeit verringern, in der wichtige Inhalte des Englischunterrichts behandelt werden könnten.	siehe oben
take time away from covering important English content.	see above
für mich mehr Vorbereitungszeit bedeuten, um den Unterricht zu planen.	siehe oben
cause me more planning time for designing curriculum and arranging groups of students.	see above
mir das Erfassen von Leistungen erschweren.	siehe oben
make it harder for me to measure outcomes.	see above

1.4.4 Perceived Subjective Norm toward CLL Use

Bitte geben Sie die Wahrscheinlichkeit an, mit der die folgenden Personen aus Ihrer Sicht glauben, dass Sie kooperatives Lernen in Ihrem Englischunterricht einsetzen sollten.
Bitte kreuzen Sie in jeder Zeile die Ziffer an, die Ihrer Meinung am ehesten entspricht.
Die Antwortmöglichkeiten sind:
① sehr unwahrscheinlich
② eher unwahrscheinlich
③ weder noch
④ eher wahrscheinlich
⑤ sehr wahrscheinlich

Item	Key
Schulleitung/-verwaltung (Schulleiter/in, didaktischer Leiter/in, Fachgruppenleiter/in, Schulaufsichtsbehörde, etc.)	① sehr unwahrscheinlich ② eher unwahrscheinlich ③ weder noch ④ eher wahrscheinlich ⑤ sehr wahrscheinlich
school administrators (principal, curriculum director, superindendent, etc.),	① very unlikely ② slightly unlikely ③ neither ④ slightly likely ⑤ very likely
Schülerinnen und Schüler	Siehe oben
students	see above
Lehrer/innen an meiner Schule (insbesondere die, mit denen ich häufig zusammenarbeite bzw. falls vorhanden: Team-Lehrer)	siehe oben
our teachers, especially team teachers	see above
Mitarbeiter/innen des Kultusministeriums	siehe oben
people in the Ministry of Education	see above
Personen, die in die schulischen Angelegenheiten einbezogen werden wollen (Therapeuten, Logopäden, etc.)	siehe oben
people interested in inclusion (therapist, speech teachers, special education teachers, etc.)	see above
Eltern im Allgemeinen	siehe oben
parents in general	see above

Eltern von sehr guten Schülern	siehe oben
parents of academically gifted students	see above
Lehrer/innen, die traditionellen Unterricht durchführen	siehe oben
traditional teachers who are teacher-directed	see above

1.4.5 Sense of General Teaching Efficacy

Geben Sie bitte an, wie wahrscheinlich es ist, dass die folgenden Bedingungen gegeben sind, wenn sie kooperatives Lernen einsetzen wollen.
Bitte kreuzen Sie in jeder Zeile die Ziffer an, die Ihrer Meinung am besten entspricht.
Die Antwortmöglichkeiten sind:
① sehr unwahrscheinlich
② eher unwahrscheinlich
③ weder noch
④ eher wahrscheinlich
⑤ sehr wahrscheinlich

Item	Key
materielle Ressourcen (Gelder, Hilfsmittel und Ausstattung, etc.)	① sehr unwahrscheinlich ② eher unwahrscheinlich ③ weder noch ④ eher wahrscheinlich ⑤ sehr wahrscheinlich
having available resources (funding, curriculum materials, supplies and equipment, etc.)	① very unlikely ② slightly unlikely ③ neither ④ slightly likely ⑤ very likely
Fortbildungsmöglichkeiten für Kollegen/Kolleginnen zu kooperativem Lernen	siehe oben
staff development opportunities on cooperative learning	see above
geringere Betonung von Leistungskontrollen und -beurteilung	siehe oben
less emphasis on testing and assessment	see above
„team-teaching“ and kollegiale Unterstützung	siehe oben
team teaching and collegial support	see above
Unterrichtsideen für kooperatives Lernen	siehe oben
curriculum ideas for cooperative learning	see above
institutionelle Unterstützung	siehe oben
administrative support	see above
Zeit zum Planen und Einsetzen kooperativen Lernens	siehe oben

time to plan and implement cooperative learning	see above
Größe und Gestaltung von Klassenräumen, die kooperatives Lernen ermöglichen	siehe oben
classroom space and arrangements that facilitate cooperative learning	see above
kleinere Klassen und/oder zusätzliches pädagogisches Personal (z.B. Schulassistenten, Sozialpädagogen) im Klassenraum	siehe oben
smaller classes of students and/or more adult help in the classroom	see above
Schüler, die über soziale Fertigkeiten verfügen	siehe oben
students who have cooperative skills	see above

1.4.6 Sense of Personal Teaching Efficacy

Bitte geben Sie an, inwieweit Sie den folgenden Aussagen zustimmen. Kreuzen Sie bitte wieder die für Sie am besten passende Ziffer an.
Die Antwortmöglichkeiten sind:
①trifft gar nicht zu
② trifft nicht zu
③ trifft eher nicht zu
④ trifft eher zu
⑤ trifft zu
⑥ trifft völlig zu

Item	Key
Wenn ein/e Schüler/in besser ist als gewöhnlich, liegt es oft daran, dass ich mich etwas mehr als sonst angestrengt habe.	①trifft gar nicht zu ② trifft nicht zu ③ trifft eher nicht zu ④ trifft eher zu ⑤ trifft zu ⑥ trifft völlig zu
When a student does better than usual many times it is because I exerted a little extra effort.	① strongly disagree ② moderately disagree ③ disagree slightly more than agree ④agree slightly more than disagree ⑤ moderately agree ⑥ strongly agree
Wenn ein/e Schüler/in Probleme mit einer Aufgabe hat, bin ich gewöhnlich im Stande, die Aufgabe an sein/ ihr Niveau anzupassen.	siehe oben
When a student is having difficulty with an assignment, I am usually able to adjust it to his/ her level.	see above
Wenn eine/e Schüler/in eine bessere Note erhält als normalerwiese, liegt es in der Regel daran, dass ich bessere Unterrichtsmethoden gefunden habe, den/die Schüler/in zu unterrichten.	siehe oben
When a student gets a better grade than he/she usually gets, it is usually because I found better ways of teaching the student.	see above
Wenn ich es wirklich versuche, kann ich die meisten der schwierigen Schüler/innen auch erreichen.	siehe oben

When I really try, I can get through to most difficult students.	see above
Wenn sich die Noten meiner Schüler/innen verbessern, liegt es normalerweise daran, dass ich effektivere Unterrichtsansätze gefunden habe.	siehe oben
When the grades of my students improve it is usually because I found more effective teaching approaches.	see above
Wenn ein/e Schüler/in ein neues Konzept schnell beherrscht, dürfte es daran liegen, dass ich die erforderlichen Schritte zur Vermittlung des Konzepts kenne.	siehe oben
If a student masters a new concept quickly, this might be because I knew the necessary steps in teaching this concept.	see above
Wenn die Schüler/innen sich nicht an Informationen erinnern können, die ich in einer vorherigen Stunde gegeben habe, wüsste ich, wie ich sie anleiten kann, damit sie die Informationen in der nächsten Unterrichtsstunde besser behalten.	siehe oben
If students did not remember information I gave in a previous lesson, I would know how to increase retention in the next lesson.	see above
Wenn ein/e Schüler/in in meiner Klasse störend und laut wird, bin ich mir sicher, Techniken zu kennen, ihn/sie schnell in eine andere Richtung zu lenken.	siehe oben
If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.	see above
Wenn eine/r meine/r Schüler/innen eine Aufgabe nicht erledigen könnte, wäre ich in der Lage genau abzuschätzen, ob die Aufgabe auf dem richtigen Schwierigkeitsniveau war.	siehe oben
If one of my students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.	see above

1.4.7 Sense of Actual Behavioral Control

Item	Key - Categorization
Falls Sie die Zusammenarbeit in Ihrem Unterricht stärker fördern wollen: Welche Veränderungen oder Hilfen wünschen Sie sich? (Bitte denken Sie bei der Beantwortung dieser Frage insbesondere an Ihren Englischunterricht.)	see App. B4
If you would like to promote cooperation significantly in your classes: What changes or assistance do you wish for? (Please think of your English classes when responding to this question.)	see App. B4
Verschiedene Schwierigkeiten verhindern häufig den Einsatz kooperativer Arbeitsformen. Welche Hindernisse treffen für Sie bzw. an Ihrer Schule zu? (Bitte denken Sie bei der Beantwortung dieser Frage insbesondere an Ihren Englischunterricht.)	see App. B4
Numerous challenges often impede the use of cooperative learning arrangements. Which boundaries do apply for you and your school? (Please think of your English classes when responding to this question.)	see App. B4

1.5 CLL Use

1.5.1 Frequency of CLL Use

Bei der Beantwortung der folgenden Fragen beziehen Sie Ihre Antworten bitte auf die Klasse oder Schülergruppe, in der Sie am stärksten versucht haben, mit kooperativen Lehr-Lernformen im Englischunterricht zu arbeiten.

Item	Key
Wie viele Stunden Englisch unterrichten Sie pro Woche in der Klasse, an die Sie bei der Beantwortung des Fragebogens gedacht habe?	__ Stunden
How many hours of English do you teach in the class, you have been thinking of, when completing the questionnaire?	__ hours
Wie oft haben Sie in den letzten zwei Wochen kooperative Lehr-Lernformen in Ihrem Englischunterricht verwendet?	❑ gar nicht ❑ 1- bis 2-mal ❑ 3- bis 4-mal ❑ 5- bis 6-mal ❑ 7- bis 8-mal ❑ sonstiges
How often have you used cooperative learning procedures in your English classes in the last two weeks?	❑ not at all ❑ 1 to 2 times ❑ 3 to 4 times ❑ 5 to 6 times ❑ 7to 8 times ❑ other

1.5.2 Quality of CLL Use – Use of Instructional Principles

Im Folgenden interessiert uns, wie Sie kooperative Lehr-Lernformen in Ihrem Unterricht einsetzen. Bitte kreuzen Sie in jeder Zeile die Antwortmöglichkeit an, die Ihrer Meinung am ehesten entspricht.

Item	Key
Welche Gruppengrößen verwenden Sie zurzeit in Ihrem Englischunterricht? (1) zwei Schüler/innen pro Gruppe (2) drei Schüler/innen pro Gruppe (3) vier Schüler/innen pro Gruppe (4) fünf Schüler/innen pro Gruppe (5) sechs und mehr Schüler/innen pro Gruppe	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
What group sizes do you currently use in your classroom? (1) two (2) students per group (2) three (3) students per group (3) four (4) students per group (4) five (5) students per group (5) six or more students per group	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Wie teilen Sie die Schüler/innen in Gruppen ein? (6) Die Schüler/innen suchen sich aus, mit wem sie zusammenarbeiten wollen. (7) Ich teile die Schüler/innen mit den gleichen Fähigkeiten in eine Gruppe ein. (8) Ich teile Schüler/innen mit unterschiedlichen Fähigkeiten in eine Gruppe ein. (9) Die Schüler/innen werden nach dem Zufallsprinzip in Gruppen eingeteilt.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
How do you assign students to cooperative learning groups? (6) Students choose who they want to work with. (7) I assign students of the same ability to a group. (8) I assign students of different abilities to a group. (9) Students are randomly assigned to groups.	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Wenn die Schüler/innen in Gruppen zusammenarbeiten, wie tun sie das räumlich gesehen? (10) Die Schüler/innen können die Gruppenmitglieder sehen und hören. (11) Die Gruppen sind räumlich von einander getrennt, so dass sie sich nicht gegenseitig behindern. (12) Ich kann mich leicht von Gruppe zu Gruppe bewegen.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer

(13) Die Gruppen sitzen wo und wie auch immer sie wollen.	
When students work in groups, how are the groups physically arranged? (10) Students can see and hear group members. (11) Groups are physically separated so that they do not intervene with each others' learning. (12) I can easily move from group to group. (13) Groups sit where and in whatever arrangement they want to.	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Welche Materialien werden an die Gruppenmitglieder verteilt? (14) Jede/r Schüler/in in der Gruppe bekommt die kompletten Materialien. (15) Jede Gruppe bekommt die kompletten Materialien. (16) Jede/r in der Gruppe bekommt einen Teil des Materials.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
What materials are distributed to group members? (14) Each student within the group has a set of materials. (15) Group members share one set of materials. (16) Each group member has a different piece of the materials' set.	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Wie verteilen Sie die Aufgaben in den Gruppen? (17) Die Gruppenmitglieder haben unterschiedliche Aufgaben, die sich ergänzen. (18) Die Gruppenmitglieder haben die gleichen Aufgaben.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
How do you assign tasks within the groups? (17) The group members have different tasks that supplement each other (e.g., Reader, Writer, etc.). (18) The group members have the same tasks.	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
(19) Sagen Sie den Schüler/innen bevor sie beginnen, eine Aufgabe zu bearbeiten, wie ihr Arbeitsergebnis bewertet wird?	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
(19) Before students begin working on an assignment, do you tell them how their work will be evaluated?	❑ (almost) never ❑ seldom ❑ sometimes ❑ often

	❑ (almost) always
Wie arbeiten die Schüler/innen mit anderen Schüler/innen in ihrer Gruppe zusammen? (20) Jede/r Schüler/in arbeitet für sich und alle geben ihr Arbeitsergebnis gemeinsam ab. (21) Die Schüler/innen wetteifern in der Gruppe, um die meiste Arbeit zu machen. (22) Die Schüler/innen diskutieren, teilen sich die Materialien und passen auf, dass alle Gruppenmitglieder mitmachen.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
How do students interact with other students in their cooperative group? (20) Students in group work individually and turn in their work together. (21) Students compete within the group to do the most work. (22) Students share ideas and materials making sure that all group members are actively involved.	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Wie fördern Sie die sozialen Fertigkeiten Ihrer Schüler/innen? (23) Den Schüler/innen werden die sozialen Fertigkeiten genannt, die sie in Gruppen verwenden sollen, aber sie erhalten wenig Feedback über ihren Gebrauch. (24) Die soziale Fertigkeit wird definiert und geübt. Die Gruppen werden beobachtet und erhalten Feedback. (25) Die soziale Fertigkeit wird definiert, geübt und beobachtet.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
How do you promote the mastery of interpersonal and group skills by students? (23) Students are told the social skills they need to use in cooperative groups, but little feedback is given to them on their use. (24) The social skill is defined and practiced. Groups are observed and feedback is given to them. (25) The social skill is defined, practiced and monitored.	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Was tun Sie während Ihre Schüler/innen in Gruppen arbeiten? (26) Ich greife nicht in die Gruppenarbeit ein und arbeite leise an meinem Schreibtisch. (27) Ich gehe von Gruppe zu Gruppe und sage den Schüler/innen was sie besser machen können, um die Aufgabe zu bearbeiten.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer

(28) Ich gehe von Gruppe zu Gruppe und berate die Schüler/innen gelegentlich über Möglichkeiten die Aufgabe zu erledigen und effektiv miteinander zu arbeiten.

What do you do while students are working in groups?
(26) I do not interfere with group work and work quietly at my desk.
(27) I move from group to group and tell students how they can better complete the task.
(28) I move from group to group and occasionally consult with students on ways to complete the task and work effectively with each other.

- ❑ (almost) never
- ❑ seldom
- ❑ sometimes
- ❑ often
- ❑ (almost) always

Wie reflektieren Sie die Gruppenprozesse in Ihrer Klasse?
(29) Mein Stundenplan lässt keine Zeit zur Reflexion der Gruppenprozesse zu.
(30) Meine Schüler/innen diskutieren darüber, wie gut sie miteinander gearbeitet haben.
(31) Ich verwende strukturierte Methoden zur Reflexion der Gruppenprozesse.
(32) Die Reflexion der Gruppenprozesse ist ein Teil der Unterrichtsstunde und die Schüler/innen geben ihre Reflexionsunterlagen zusammen mit ihren anderen Arbeitsergebnissen ab.

- ❑ (fast) nie
- ❑ selten
- ❑ manchmal
- ❑ häufig
- ❑ (fast) immer

How is group processing conducted in your classroom?
(29) My schedule does not allow time for groups to process.
(30) My students discuss how well they worked with each other.
(31) I have several structured ways for students to process in groups.
(32) I structure the processing as part of the lesson and have students turn in processing assignments with their other work.

- ❑ (almost) never
- ❑ seldom
- ❑ sometimes
- ❑ often
- ❑ (almost) always

1.5.3 Quality of CLL use – Use of German as the Language of Instruction

Wie oft verwenden Sie die deutsche Sprache in folgenden Unterrichtssituationen?/ How often do you use the German language in the following instructional situations?

Item	Key
Störungen/distractions	❑ nie/never ❑ selten/seldom ❑ manchmal/sometimes ❑ häufig/often
persönliche Gespräche/personal Chats	siehe oben/see above
Einführung von neuem Stoff/introduction of new material	siehe oben/see above
Diskussionen/discussions	siehe oben/see above
organisatorische Fragen/organizational questions	siehe oben/see above
grammatische Erklärungen/grammatical explanations	siehe oben/see above
Anweisungen an Leistungsschwache/instructions for low-achievers	siehe oben/see above
Rückgabe von Arbeiten/return of tests	siehe oben/see above
Hausaufgabenbesprechung/homework discussion	siehe oben/see above
Erklärung von Aufgaben/explanation of exercises	siehe oben/see above
unvorhergesehene Ereignisse/unexpected events	siehe oben/see above

1.6 Quality of the Training

1.6.1 Quality of the Training as a Whole

Bitte bewerten Sie nun das Training anhand der folgenden Aussagen. Kreuzen Sie jeweils die Ziffer an, die Ihrer Meinung am besten entspricht. Die Antwortmöglichkeiten sind:
① sehr schlecht
② schlecht
③ mittelmäßig
④ gut
⑤ sehr gut

Item	Key
Angemessenheit des Inhalts/appropriateness of the content	① sehr schlecht/very bad ② schlecht/bad ③ mittelmäßig/average ④ gut/good ⑤ sehr gut/very good
Länge der Trainingssitzungen/length of the training sessions	siehe oben/see above
Tageszeit der Trainingssitzungen/time of day of the training sessions	siehe oben/see above
Lehrvortrag/trainer lecture	siehe oben/see above
Audio-visuelle Medien/audio-visuelle media	siehe oben/see above
Erfahrungssituationen/experiential situations	siehe oben/see above

Bitte bewerten Sie die Nützlichkeit des Trainings im Hinblick auf die Durchführung kooperativen Lernens im Englischunterricht. Kreuzen Sie die Ziffer an, die Ihre Meinung am besten widerspiegelt.
Die Antwortmöglichkeiten sind:
① sehr schlecht
② schlecht
③ mittelmäßig
④ gut
⑤ sehr gut

Item	Key
Nützlichkeit des Trainings/usefulness of the training	① sehr schlecht/very bad ② schlecht/bad ③ mittelmäßig/average ④ gut/good ⑤ sehr gut/very good

Bitte bewerten Sie das Training insgesamt. Kreuzen Sie die Ziffer an, die Ihre Meinung am besten widerspiegelt.
Die Antwortmöglichkeiten sind:
① sehr schlecht
② schlecht
③ mittelmäßig
④ gut
⑤ sehr gut

Item	Key
Gesamteindruck des Trainings/overall impression of the training	① sehr schlecht/very bad ② schlecht/bad ③ mittelmäßig/average ④ gut/good ⑤ sehr gut/very good

Item	Key
An wie vielen Trainingssitzungen haben Sie teilgenommen?	an __ von sechs
How many training sessions have you attended?	__ out of six

Anmerkungen/ comments: _____

1.6.2 Quality of each Training Session

Directions: “Low” means very poor and “high” means very good.

Item	Key
Please indicate how valuable you found the content of the training session. Comments/suggestions	① low ② ③ ④ ⑤ high ____
Please indicate how valuable you found what you have learned today for your implementation of cooperative learning in the EFL classroom. Comments/suggestions	① low ② ③ ④ ⑤ high ____

2 EFL Learner Survey Instruments

2.1 Cover Letter

Liebe Schülerin, lieber Schüler,
mit diesem Fragebogen möchten wir erfahren, was Du vom Englischunterricht in Deiner Klasse hältst. (Schüler der Sekundarstufe II ändern die Anrede in Gedanken bitte in die „Sie“- Form.)
Auf den folgenden Seiten befinden sich Aussagen über Deine Klasse und den Englischunterricht. Überprüfe bitte jede Aussage daraufhin, ob sie Deine Klasse und den Englischunterricht richtig oder falsch beschreibt.
Denke bitte daran, dass es in diesem Fragebogen nicht um Deine Schulnoten geht, sondern um Deine Meinung über die Klasse und den Englischunterricht bei Eurer Lehrerin oder Eurem Lehrer.
Wenn Du meinst, dass eine Aussage nicht richtig auf Deine Klasse und den Unterricht passt, kreuze bitte trotzdem eine Antwortmöglichkeit an.

2.2 Code

Da nach einiger Zeit eine zweite Befragung durchgeführt werden soll, ist es wichtig, die Fragebögen dann jeweils derselben Person zuordnen zu können. Um Anonymität zu gewährleisten, wird dazu anstelle des Namens auf jedem Fragebogen ein Code notiert.
Trage bitte für diesen Code den jeweils beschriebenen Buchstaben bzw. die jeweilige Zahl in die folgenden Kästchen ein:

Item	Key
zweiter Buchstabe Deines Geburtsorts (Beispiel: Peine = E) second letter of your place of birth (example: Peine = E)	❑
zweiter Buchstabe des Vornamens Deiner Mutter (Beispiel: Lotte = O) second letter of your mother’s first name (example: Lotte = O)	❑
erster Buchstabe Deines Geburtsmonats (Beispiel: März = M) first letter of your month of birth (example: March = M)	❑
Dein Geburtstag als Zahl (Beispiel: 1. Dezember = 01) your day of birth as a number (example: December 1 = 01)	❑❑

2.3 Socio-demographic Data

Im Folgenden bitten wir Dich noch einige Angaben zu Deiner Person zu machen.

Item	Key
Alter	__ Jahre
age	__ Years
Geschlecht	❑ weiblich ❑ männlich
sex	❑ female ❑ male

2.4 Frequency of EFL Teachers' CLL Use

Bitte denke beim Beantworten der folgenden Fragen an den Englischunterricht in dieser Klasse. Kreuze bitte jeweils die Antwortmöglichkeit an, die Deiner Meinung entspricht.

Item	Key
Wie viele Stunden Englisch hast Du pro Woche?	__ Stunden
How many hours of English do you have per week?	__ hours
Wie oft hast Du in den letzten zwei Wochen mit einem Partner oder in einer Gruppe gearbeitet?	❑ gar nicht ❑ 1- bis 2-mal ❑ 3- bis 4-mal ❑ 5- bis 6-mal ❑ 7- bis 8-mal ❑ sonstiges
How often have you worked with a partner or in a group in the last two weeks?	❑ not at all ❑ 1 to 2 times ❑ 3 to 4 times ❑ 5 to 6 times ❑ 7to 8 times ❑ other

2.5 Quality of EFL Teachers' CLL Use

Im Folgenden interessiert uns, wie Ihr in Gruppen zusammenarbeitet. Bitte kreuze jeweils die Antwortmöglichkeit an, die Deiner Meinung entspricht.

Item	Key
Wenn Ihr in Gruppen arbeitet, wie groß sind die Gruppen normalerweise? (1) zwei Schüler/innen pro Gruppe (2) drei Schüler/innen pro Gruppe (3) vier Schüler/innen pro Gruppe (4) fünf Schüler/innen pro Gruppe (5) sechs und mehr Schüler/innen pro Gruppe	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
If you are working in groups, how big are the groups usually? (1) two students per group (2) three students per group (3) four students per group (4) five students per group (5) six or more students per group	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Wenn Ihr in Gruppen arbeitet, wie werden die Gruppen gebildet? (6) Wir suchen uns aus, mit wem wir zusammenarbeiten wollen. (7) Die /der Lehrer/in teilt uns in Gruppen ein. (8) Wir werden nach dem Zufallsprinzip in Gruppen eingeteilt.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
If you are working in groups, how are the groups composed? (6) We choose with whom we would like to work together. (7) The teacher assigns us to groups. (8) We are randomly assigned to groups.	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Wenn Ihr in Gruppen arbeitet, wie sitzt Ihr zusammen? (9) Wir sitzen uns gegenüber, so dass wir alle Gruppenmitglieder sehen und hören können. (10) Zwischen den Gruppentischen ist etwas Platz, damit wir uns nicht gegenseitig stören. (11) Jeder kann sitzen, wie er will.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
If you are working in groups, how are you seated? (9) We are sitting face-to-face so that we can see and hear all group members. (10) There is some room between group tables so that	❑ (almost) never ❑ seldom ❑ sometimes ❑ often

we don't disturb each other. (11) Everyone is allowed to sit in whatever arrangement he wants to.	❑ (almost) always
Wenn Ihr bei der Gruppenarbeit Material (Arbeitsblätter, Lexika, etc.) bekommt, was bekommt Ihr? (12) Jede/r in der Gruppe bekommt die kompletten Materialien. (13) Jede Gruppe bekommt die kompletten Materialien. (14) Jede/r in der Gruppe bekommt einen Teil des Materials.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
If you get materials (worksheets, dictionaries, etc.) while working in groups, what do you get? (12) Each one in the group gets the complete set of materials. (13) Each group gets the complete set of materials. (14) Each on in the group gets a piece of the set of materials.	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Wenn Ihr in Gruppen arbeitet, wie sind die Aufgaben verteilt? (15) Die Gruppenmitglieder haben unterschiedliche Aufgaben, die sich ergänzen (z.B. Vorleser, Schreiber, etc.). (16) Die Gruppenmitglieder haben die gleichen Aufgaben.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
If you are working in groups, how are the tasks distributed? (15) Group members have different complementary tasks (e.g., Reader, Recorder, etc.) (16) Group members have the same tasks.	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
(17) Sagt Euch die/der Lehrer/in bevor Ihr beginnt, eine Aufgabe zu bearbeiten, wie Euer Arbeitsergebnis bewertet wird?	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
Does the teacher tell you before you begin to work on a task how your work will be evaluated?	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Wenn Ihr in Gruppen arbeitet, wie macht Ihr das? (18) Jede/r arbeitet für sich und am Schluss sammeln	❑ (fast) nie ❑ selten

wir die Ergebnisse. (19) Wir diskutieren gemeinsam über Ideen, bearbeiten die Aufgaben gemeinsam und passen auf, dass alle Gruppenmitglieder mitmachen.	❑ manchmal ❑ häufig ❑ (fast) immer
If you are working in groups, how do you do that? (18) Each one works separately and at the end we collect the results. (19) We discuss ideas together, complete the tasks together and make sure that all group members are involved.	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Bringt Euch die/ der Lehrer/in bei, wie man am besten in Gruppen zusammenarbeitet? (20) Wir legen mit der/dem Lehrer/in bestimmte „Regeln“ fest, er/sie beobachtet uns während der Gruppenarbeit, und sagt uns, ob wir es gut gemacht haben. (21) Die/der Lehrer/in sagt uns nicht, wie man am besten in Gruppen zusammenarbeitet.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
Does the teacher teach you how to best work in groups? (20) We determine certain “rules“ with the teacher, he/she observes us while we are working in groups and tells us if we did it well. (21) The teacher does not tell us how to best work in groups together.	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Was macht die/der Lehrer/in während Ihr in Gruppen arbeitet? (22) Sie/er arbeitet an ihrem/seinen Schreibtisch. (23) Sie/er geht von Gruppe zu Gruppe und sagt uns, was wir besser machen könnten. (24) Sie/er geht von Gruppe zu Gruppe und berät uns, wenn wir etwas wollen.	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer
What does the teacher do while you are working in groups? (22) She/he works at her/his desk. (23) She/he moves from group to group and tells us, what to do better. (24) She/he moves from group to group and consults us if we want something.	❑ (almost) never ❑ seldom ❑ sometimes ❑ often ❑ (almost) always
Bewertet Ihr nach der Gruppenarbeit, wie gut Ihr zusammengearbeitet habt? (25) Wir diskutieren darüber, wie gut wir miteinander gearbeitet haben. (26) Wir benutzen Arbeitsblätter um zu bewerten, wie	❑ (fast) nie ❑ selten ❑ manchmal ❑ häufig ❑ (fast) immer

gut wir zusammengearbeitet haben, und geben sie zusammen mit den anderen Arbeitsergebnissen ab.

Do you evaluate how well you worked together after group work?
(25) We discuss how well we worked together.
(26) We use worksheets to assess how well we worked together and turn them in with the other results.

- ❑ (almost) never
- ❑ seldom
- ❑ sometimes
- ❑ often
- ❑ (almost) always

Appendix B4: Details from Data Analyses

Table of Contents

1 Analyses of Teachers' and Students' Quantitative Data

Table 1 presents teachers' and students' individual scores on the three measures for: the frequency of CLL use (teacher and student ratings), the intention to use CLL, the sense of personal teaching efficacy, the sense of general teaching efficacy, the subjective norm, the attitude toward CLL, the use of instructional principles (teacher ratings), the use of German as the language of instruction, and the use of instructional principles (student ratings).

Table 1: Analyses of Teachers' and Students' Quantitative Data

teacher	measurement time	CLL use teacher	CLL use student	intention	personal efficacy	general efficacy	subjective norm	attitude	CLL principles teacher	German language	CLL principles students
Teacher 1	pre	0,56	0,25	4	3	3,5	3,5	4	0,6	3	0,625
	post	0,19	0,44	3	4	3,5	4	4	0,7	2	0,7
	follow-up	0,58	0,58	3	5	3	4	4	0,9	2	0,8
Teacher 2	pre	0,19	0	3	4	3	3,5	4	0,57	3	0,73
	post		0,19	3	4	2	3	4	0,6	3	0,6
	follow-up	0	0		4	3	3	4	0,71	3	0,7
Teacher 3	pre	0	0,19	3	2	3,5	5	5	0,3	3	0,5
	post	0,44	0,44	4	4	3,5	4,5	4	0,4	3	0,6
	follow-up	0,19	0,19	4	4	3,5	5	5	0,5	3	0,67
Teacher 4	pre	0	0,25	3	3	1	3	4	0,6	3	0,5
	post	0,58	0,25	4	4	2,5	4,5	5	0,9	2	0,44
	follow-up	0,25	0,25	3	5	4	3	5	0,9	2	0,67
Teacher 5	pre	0,94	0,19	3	4	2	3	4	0,7	2	0,5
	post	0,70	0,44	4	5	3	4	5	0,8	2	0,7
	follow-up	0,92	0,25	2	4	3	4	5	1	2	0,6
Teacher 6	pre	0,25	0,58	3	4	3	3,5	4	0,5	3	0,52
	post	0,58	0,58	4	5	4	3,5	4	0,8	1	0,6
	follow-up	0,58	0,58	3	4	3,5	3,5	4	0,7	2	0,6
Teacher 7	pre	0,44	0,44	2	4	1	4	3	0,4	2	0,58
	post	0,94	0,19	3	4	3	4	3	0,8	2	0,5
	follow-up	0,19	0,19	4	4	3	3	3,5	0,5	2	0,5
Teacher 8	pre	0,19	0,31		4	2	3	4	0,4	2	0,6
	post	0,44	0,94	4	4	3	3	5	0,9	2	0,74
	follow-up	0,19	0,19	3	5	3	4	5	0,6	1	0,6

Teacher 9	pre	0	0	3	4	3	3,5	3	0,5	2	0,3
	post	0,92	0,25	3	5	2	3,5	4	0,3	1	0,5
	follow-up	0,25	0,25	3	4	2	4	3	0,4	1	0,42
Teacher 10	pre	0,19	0,19	4	4	2,5	3,5	4	0,2	2,5	0,5
	post	0,94	0,44	3	5	5	4,5	5	0,9	1	0,7
	follow-up										0,4
Teacher 11	pre	0	0	3	4	1,5	2,5	4	0,4	3	0,1
	post	0	0,58	3	4	1,5	2	4	0,4	3	0,57
	follow-up	0,13	0,13	3	4	2	3	4	0,67	2	0,5
Teacher 12	pre	0,19	0	3	3		3,5	4	0,7	2	
	post	0,58	0	3	2	3	2,5	4	0,78	2	
	follow-up	0	0	3	4	2	4	3	0,3	2	
Teacher 13	pre	0,88	0,38	3	4	2,5	3,5	4	0,8	3	
	post	0,38	0,38	2	5	2,5	1	4	0,89	2	
	follow-up	0	0,38	2	4	3	3	3,5	0,7	2	
Teacher 14	pre	0,25	0,58	3	3		3,5	4	0,56	3	
	post	0,25	0,25	3	3	1	3	3,5	0,33	3	
	follow-up	0,25	0,25	2	3	3	4	3	0,6	3	
Teacher 15	pre	0,25	0,58	4	4	3	4	5	0,5	1	
	post	0,58	0,58	2	4	3	4	5	0,7	2	
	follow-up	0,25	0,58	2	4	3	4	4,5	0,56	3	
Teacher 16	pre	0,44	0,19	2	4	2,5	3	3	0,2	1	
	post	0,19	0,09	2	4	2,5	3	3	0,6	2	
	follow-up	0	0,19	1	4	2	3	3	0,3	2	
Teacher 17	pre	0,19	0,44	3	4	3	2,5	3	1	2	
	post	0,44	0,44	2	4	2	3	4	0,5	2	
	follow-up	0,19	0,44	2	4	4	3	3	0,5	2	
Teacher 18	pre	0,44	0,19	3	5	2	3	4	0,6	2	
	post	0,19	0,19	3	4	2	3,5	4	0,4	2	
	follow-up	0	0,19	2	4	2	3	4	0,4	2	
Teacher 19	pre	0,25	0,25	3	3	4	3	3	0,3	2	
	post	0,25	0,25	3	3	3	3,5	4	0,2	2	
	follow-up	0	0	3	4	2	3	4	0,2	2	

Note: *Teachers 1* to *11* belong to the treatment group. *Teachers 12* to *19* belong to the comparison group.

2 Analyses of EFL Teachers' CLL Conceptions

2.1 Teacher Responses – CLL Conceptions

Table 2 presents the EFL teachers' responses on the pretest.

Table 2: EFL Teachers' CLL Conceptions – Pretest Data

EFL Teacher	German Definition	English Translation
1 (TG)	Schüler arbeiten miteinander und helfen sich wechselseitig. Probleme werden gemeinsam gelöst. Teamarbeit steht im Vordergrund.	Students work together and help one another. Problems are solved together. Teamwork is essential.
2 (TG)	Schüler lernen nach Anweisung; PA, GA; "Koop" = miteinander, d.h. u.a. auch Helfersystem	Students learn according to instructions. Pair work (PW), group work (GW) "coop." = together, i.e., inter alia "helper system"
3 (TG)	Schüler arbeiten miteinander, nur geringer Lehreranteil.	Students work together, little teacher involvement.
4 (TG)	mit anderen/von anderen/gemeinsam Lernen	with others/from others/learning together
5 (TG)	Schaffung von Unterrichtssituationen, in denen Schüler zunächst zu zweit oder in Gruppen engl. Situationen erarbeiten. Dialoge/gegenseitiges Korrigieren/gemeinsame Mind-maps/Rollenspiele	creating situations in which students work on "English situations" in pairs or groups. dialogues/mutual correction/joint mind-maps/role plays
6 (TG)	Ich verstehe darunter Lernformen, bei denen 2 oder mehr Schüler(innen) gemeinsam Lernstoff erarbeiten und entweder 1) unterschiedliche Fähigkeiten in ein sinnvolles Ganzes einbringen oder 2) sich Bereiche des zu lösenden Problems voraussetzungsgerecht aufteilen.	I understand it as ways of learning in which two or more students work together on subject matter and either 1) contribute different abilities to create a meaningful whole or 2) divide parts of the problem to be solved among themselves according to their abilities.
7 (TG)	SchülerInnen helfen SchülerInnen, Schüler werden Lehrer.	Students help students. Students become teachers.
8 (TG)	Any method recommended by Norm Green during the training (s.o.).[1]	Any method recommended by Norm Green during the training (s.o.).

[1] *Teacher 8* did not give a German definition.

9 (TG)	Unter kooperativem Lernen versteht man die Bearbeitung von Aufgaben in interaktiven Gruppenanordnungen. Durch das kooperative Lernen profitieren im Idealfall und bei guter Organisation u. Durchführung alle im Lernprozess involvierten Personen.	Cooperative learning is the completion of tasks in interactive group compositions. Cooperative learning ideally, and given good organization and implementation benefits every person involved in the learning process.
10 (TG)	Schüler erarbeiten neue Inhalte gemeinsam.	Students work on new contents together.
11 (TG)	Ein eher schülerzentrierter Lernprozess/Gestaltung d. Lernsituation, in der die Schüler stärker Verantwortung übernehmen.	A rather student-centered learning process/creation of the learning situation in which students take more responsibility.
12 (CG)	Lernen im Team mit gegenseitiger Hilfe + positiver Bestätigung (gegenseitig)	learning in teams with mutual help and positive acknowledgment (mutual)
13 (CG)	Lernformen, die schülerzentriert sind, bei denen die Schüler miteinander lernen und ich mich als Lehrende "zurückziehe", aber unterstütze (die inhaltliche Arbeit, das soziale Miteinander)	ways of learning that are student-centered in which students learn together and I, as a teacher, "draw back", but provide support (the content-related work, the social interaction)
14 (CG)	Die Schüler arbeiten selbstständig in Gruppen (die jedes Mal neu zusammengestellt werden) mit 2-4 Schülern. Die Lehrerin sitzt abseits, gibt nur bei Notfall Hilfe, kümmert sich um Schwächere. Manchmal koordiniert sie zum Schluss (wenn es eine Repräsentationsphase gibt) die Ergebnisse.	Students work independently in groups (assigned differently each time) of two to four students. The teacher sits apart, only provides assistance if necessary, takes care of weaker students. Sometimes she coordinates the results at the end (if there is a presentation phase).
15 (CG)	Schüler bearbeiten vorstrukturierte Aufgaben in Partner- oder Gruppenarbeit. Die Partner/Gruppen verwenden ausschließlich die englische Sprache, präsentieren ein Ergebnis, kontrollieren je nach Aufgabe ihr Ergebnis selbst.	Students work on pre-structured tasks in pair work or group work. The partners/groups exclusively use the English language, present a result, check the result themselves depending on the task.
16 (CG)	unterstützend von- und miteinander lernen; eigener Lernprozess	promotive learning from and with each other; own learning process
17 (CG)	gemeinsames Lernen und Arbeiten (Gruppen); unterschiedliche Stärken und Kompetenzen nutzen (im kognitiven und sozialen Bereich)	learning and working together (groups); making use of different strength and competencies (in the cognitive and social area)

18 (CG)	Beim "kooperativen Lernen" lernen/arbeiten Schüler gemeinsam an einer Aufgabe. Sie können einander helfen und/oder ergänzen sich in ihren Fähigkeiten. Im Vordergrund steht gemeinsam zu arbeiten, nicht gegeneinander, um so zu einem bestmöglichen Ergebnis für alle zu kommen.	In "cooperative learning" students learn/work together on a task. They can support each other and/or complement one another's skills. The main focus is on working together, not against each other to accomplish the best possible result for everyone.
19 (CG)	Schüler und Schülerinnen helfen sich gegenseitig beim Lernen, unterstützen sich und geben sich Tipps. Die Schüler müssen gemeinsam an einer Problemstellung arbeiten. Dazu gehört auch, dass sie üben mit anderen gemeinsam zu arbeiten und nicht gegeneinander.	Students help each other with learning, support each other and provide each other with tips. The students have to work on a problem together. This also includes that they practice working together with others and not against each other.

Table 3 presents the EFL teachers' responses on the posttest.

Table 3: EFL Teachers' CLL Conceptions – Posttest Data

EFL Teacher	German Definition	English Translation
1 (TG)	Gemeinsames Arbeiten zu einem Thema unter Berücksichtigung der gegenseitigen Aufmunterung, Lob u. Anerkennung der Arbeit jedes Einzelnen.	Working together on a task taking into consideration mutual encouragement, praise and acknowledgement of individual work contributions.
2 (TG)	Gruppenarbeit mit dem Ziel: social and academic skills	group work with the goal: social and academic skills
3 (TG)	Schüler arbeiten in Gruppen zusammen. Die Gruppenmitglieder werden durch bestimmte Methoden zugeordnet, damit social skills wirken können. Schüler arbeiten zusammen, die sonst kaum Kontakt zueinander finden würden. Akademisches und soziales Lernen!	Students work together in groups. Group members are assigned by certain methods so that social skills can take effect. Students work together who otherwise would hardly come into contact with each other. Academic and social learning!
4 (TG)	soziales Lernen und Lernen von Inhalten mittels kooperativer Methoden	social learning and learning of contents via cooperative methods
5 (TG)	Selbstständiges Arbeiten mit einem oder zwei Partnern, die sich gegenseitig unterstützen und ermutigen.	Autonomous work with one or two partners who mutually support and encourage each other.

6 (TG)	Die Kooperation besteht in der gemeinsamen Verantwortung für das Lernergebnis. Die Rollen (Lesen, Schreiben, Prüfen) forcieren dies, sowie die Tatsache, dass jedes Gruppenmitglied Ergebnisse (allein) vorstellen können muss.	Cooperation consists of the mutual responsibility for the learning result. The roles (Reader, Writer, Checker) support this as well as the fact that each group member needs to be able to present the results individually.
7 (TG)	Schüler-Selbstständigkeit (Erarbeitungs- und Präsentationsphase)	student autonomy (practice and presentation phase)
8 (TG)	Arbeitsformen, bei denen durch Zusammenarbeit, Austausch von Gedanken, Ideen, Ergebnissen bestmögliche Resultate erzielt werden (auch Schulung von Teamarbeit)	modes of working in which best possible results are achieved through collaboration, exchange of thoughts, ideas, results (also schooling of team work)
9 (TG)	siehe Seite 10	see page 10
10 (TG)	Schüler lernen miteinander und voneinander. Jeder trägt die Verantwortung für sein Lernen.	Students learn with each other and from each other. Everyone is responsible for their learning.
11 (TG)	Ein schülerorientiertes Arbeiten, das möglichst viele Lernaktivitäten in Schülergruppen verlangt und so eine optimale Auseinandersetzung mit Texten, Materialien/Unterrichtsstoff allgemein, ermöglicht.	A student-centered way of work that requires as many learning activities as possible in student groups and thus allows an optimal exploration of texts, materials/subject matter in general.
12 (CG)	Zusammenarbeit, d.h. Stärkere helfen Schwächeren	co-operation, i.e., stronger students help weaker ones
13 (CG)	Ich verstehe darunter, dass Schüler in den Sozialformen Partner- und Gruppenarbeit miteinander lernen, d.h. sie arbeiten miteinander, kommen gemeinsam zu Ergebnissen, sprechen/diskutieren ggf. miteinander etc. Das soziale Lernen ist von erheblicher Bedeutung.	For me it means that students learn together in pair work and group work forms of classroom arrangement, i.e., they work together, come to a conclusion together, talk/discuss where appropriate with each other etc. Social learning is of great importance.
14 (CG)	Kooperatives Lernen bedeutet für mich, dass die Schüler/innen 1) miteinander in echten Situationen Englisch sprechen (alle Schüler gleichzeitig in PA und GA), 2) sich gegenseitig helfen, zuhören, ergänzen bei der Bewältigung schriftlicher und mündlicher Aufgaben.	For me, cooperative learning means that students 1) speak English in real situations (all students simultaneously in pair and group work), 2) help each other, listen to each other, and complement one another to cope with written and oral assignments.
15 (CG)	Schüler arbeiten in Partnerarbeit oder Kleingruppen an einer Aufgabe, klären	Students work in pairs and small groups on an assignment, sort out steps of work and

	untereinander die Arbeitsschritte und Aufgabenverteilung, präsentieren ein Ergebnis.	distribution of tasks, present a result.
16 (CG)	verschiedene Formen von Partner/ Tandemarbeit; gemeinsames Erschließen von Problemen/ Aufgaben	different forms of pair work/tandem work; joint deduction of problems/assignments
17 (CG)	—	—
18 (CG)	miteinander und voneinander lernen, durch unterschiedliche Methoden und Arbeitsformen	learning with and from each other by means of different methods and modes of working
19 (CG)	Beim kooperativen Lernen unterstützen sich die Schülerinnen beim Lernen, indem sie in Partnerarbeit oder Gruppenarbeit zusammenarbeiten. Dabei wird auch das soziale Lernen gefördert.	In cooperative learning students support each other's learning by working together in pair work or group work. In that way, social learning is fostered as well.

Table 4 presents the EFL teachers' responses on the follow-up test.

Table 4: EFL Teachers' CLL Conceptions – Follow-up Test Data

EFL Teacher	German Definition	English Translation
1 (TG)	Schüler arbeiten gemeinsam an einer Aufgabe mit unterschiedlichen Arbeitsaufträgen und finden gemeinsam Lösungen.	Students work together on an assignment with different tasks and find a solution together.
2 (TG)	—	—
3 (TG)	fachliche + soziale Kompetenzen vermitteln	conveying academic and social competencies
4 (TG)	selbstständig lernen	autonomous learning
5 (TG)	Miteinander lernen. Sich gegenseitig helfen, unterstützen, ergänzen. Gemeinsam in Gruppen durch Aufgabenteilungen zu einem Ergebnis kommen.	Learning together. Helping, supporting each other, and complementing one another. Together in groups, coming to a result through division of tasks.
6 (TG)	Der Lernprozess muss mittels eigenverantwortlicher, selbstbestimmt-arbeitsteiliger Schritte für alle Kleingruppenmitglieder erfolgreich sein. Jedes Mitglied trägt den Prozess	The learning process should be successful for all small group members through self-responsible, autonomous-division of labor steps. Each member is accountable for the process and reflects on it regularly.

	eigenverantwortlich mit und reflektiert ihn regelmäßig.	
7 (TG)	Schüler entlasten Lehrer/Schüler helfen/unterrichten Schüler.	Students disburden teachers/students help/teach students.
8 (TG)	Elemente der Methode einbauen	implementing elements of the method
9 (TG)	Eine (Lern)gruppe arbeitet organisiert/strukturiert an gemeinsamen Zielen, so dass sich der Lernzuwachs erhöht.	A learning group works in a coordinated/structured way toward common goals so that learning gains increase.
10 (TG)	—	—
11 (TG)	Eine Form des Lernens, die die Eigenständigkeit und Eigenverantwortlichkeit des Lernenden unter Einbeziehung von Gruppenprozessen innerhalb der gesamten Lerngruppe zum Ziel hat.	A form of learning which aims at student autonomy and accountability by way of integrating group processes within the whole learning group.
12 (CG)	—	—
13 (CG)	Kooperatives Lernen ist eine Form von Gruppenunterricht, bei dem das soziale Lernen besonders thematisiert wird. Partnerarbeit zähle ich auch dazu.	Cooperative learning is a form of group teaching in which social learning is specifically discussed. I would also include pair work in this.
14 (CG)	Die Schüler bearbeiten zusammen Arbeitsaufträge in verschiedenen Gruppierungen (Zufallsauslese).	Students work on tasks together in different groups (randomly assigned).
15 (CG)	Schüler arbeiten in Gruppen/Partnergruppen, organisieren ihre Arbeit untereinander, führen Übungen und Projekte durch	students work in groups/pair groups, coordinate their work among themselves, conduct exercises and projects
16 (CG)	gemeinsames Erarbeiten von Lerninhalten	joint work on learning contents
17 (CG)	siehe letzte Fragebögen	see previous questionnaires
18 (CG)	gemeinsames Lernen, miteinander Lernen, einander helfen, voneinander lernen	joint learning, learning with each other, helping each other, learning from each other
19 (CG)	Partnerarbeit, Gruppenarbeit	pair work, group work

2.2 Coding Systems for the Analyses of EFL Teachers' CLL Conceptions

Table 5 presents the coding system for the analyses of EFL teachers' CLL conception defining it as an instructional technique.

Table 5: Coding System for EFL Teachers' CLL Conceptions - Instructional Technique

Conception of CLL	Key examples	Coding rules	Level of conception
Conception I: **CLL as an Instructional Technique** Instructional techniques that aim at learner interaction in pairs and small groups and vary in length and complexity. The teacher is a performer, director, and manager.	*creating situations in which students work on "English situations" in pairs or in groups. dialogues/mutual correction/joint mind-maps/role plays*	results from teacher response of related sub-conception one to three	limited (1; no essential CLL principles named))
Sub-conception I.I: **Sense of Authority in CLL: Learner-centered with Teacher Instruction** The teacher is the primary authority for knowledge, instructs learners to work in pairs and groups, and provides little task assistance.	*Students learn according to instructions. Pair work (PW), group work (GW) "coop." = together, i.e., inter alia "helper system"* *Students work together, little teacher involvement.*	criteria of learner-centeredness with teacher instruction met	
Sub-conception I.II: **Decision Making in CLL: Pair and Group Work Techniques** Teaching decisions are based on instructional techniques that can be used in most teaching situations.	*Any method recommended by Norm Green during the training.*	criteria of pair and group work techniques met	
Sub-conception I.III: **Learning Goals and Learning Processes in CLL: Academic Learning** The primary goal of CLL is academic learning. Teachers provide necessary conditions to foster learners' academic competencies, and learners take action to acquire academic competencies.	[…] ways of learning in which two or more students work together on subject matter and either 1) contribute different abilities to create a meaningful whole or 2) divide parts of the problem to be solved among themselves according to their abilities.	criteria of academic learning and related teacher and learner actions met	

Table 6 presents the coding system for the analyses of EFL teachers' CLL conception defining it as an instructional procedure.

Table 6: Coding System for EFL Teachers' CLL Conceptions - Instructional Procedure

Conception of CLL	Key examples	Coding rules	Level of conception
Conception II: **CLL as an Instructional Procedure** An instructional procedure that combines several instructional principles and centers on increased learner interdependence to foster student autonomy and self-regulation, as well as academic and social learning. The teacher is a facilitator, an encourager, and orchestrator.	*implementing elements of the method* *social learning and learning of contents via cooperative methods*	results from teacher response of related sub-conception one to three	general (2; one essential CLL principle named) detailed (3; two or more essential CLL principles named)
Sub-conception II.I: **Sense of Authority in CLL: Learner-centered with Teacher Support** The teacher shares the authority for knowledge with learners and supports the acquisition of academic and social competencies by providing structured learning conditions and assistance of academic and social learning during CLL group work.	*A form of learning which aims at student autonomy and accountability by way of integrating group processes within the whole learning group.* *[…] I, as a teacher, "draw back" but provide support (the content-related work, the social cooperation)*	criteria of learner-centeredness with teacher support met	
Sub-conception II.II: **Decision Making in CLL: Theory and Reflection** Teaching decisions in CLL are made consciously and based on theory and reflection.	*The learning process should be successful for all small group members through self-responsible, autonomous-division of labor steps. Each member is accountable for the process and reflects on it regularly*.	criteria of theory- and reflection-based decision making met	
Sub-conception II.III: **Learning Goals and Learning Processes in CLL: Academic and Social Learning** Learning in CLL is academic and social. Teachers provide necessary conditions to foster	*conveying academic and social competencies* *Working together on a task taking into consideration mutual encouragement, praise and acknowledgement of*	criteria of academic and social learning and related teacher and learner actions met	

learners' academic and social competencies, and learners take action to practice and acquire academic and social competencies.	*individual work contributions.*

2.3 Analyses of EFL Teachers' CLL Conceptions on the Three Measures

Analyses of EFL Teachers' CLL Conceptions on the Pretest

The following four sub-conceptions described EFL teachers' CLL conceptions as an instructional technique and an instructional procedure on the pretest:

- **Sense of Authority: Learner-centered with Teacher Instruction**

Eight teachers (n_{tg} = 6; n_{cg} = 2) stated that CLL involves student interaction to complete tasks provided by the teacher who is the primary authority but who offers little task assistance. The following statements highlight the sub-conception: *Teacher 2* stated *"students learn according to instructions"*. *Teacher 11* typified CLL as *"a rather student-centered learning process/creation of the learning situation in which students take more responsibility"*. The responses of *Teacher 14* and *Teacher 15* included misconceptions about appropriate teacher behavior during the practice and the evaluation phase (Fig. 3). *Teacher 14* stated *"[…] The teacher sits apart, only provides assistance if necessary, takes care of weaker students. Sometimes she coordinates the results at the end (if there is a presentation phase)"*. According to this statement teachers' instructional behavior during the practice phase does not involve monitoring and assistance of academic and social learning of all learners as recommended by Johnson et al., (1998). Moreover, the assessment of results and the connection with old information (Haag et al., 2000) does not seem to be part of every lesson in which team-based methods are used. The response of *Teacher 15* indicates a misconception about learners' use of the English language in CLL. By saying *"[…] The partners/groups exclusively use the English language […]*" principles of *enlighted monolingualism* (Butzkamm, 1973) are neglected.

- **Sense of Authority: Learner-centered with Teacher Support**

One comparison group teacher viewed CLL as a learner-centered way of learning in which the teacher shares the authority for knowledge with the learners and supports learning processes. The following statement support the sub-conception: *Teacher 13* specified CLL as *"ways of learning that are student-centered, in which students learn together and I, as a teacher, "draw back" but provide support (content-related work, social interaction)"*.

- **Decision Making: Pair Work and Group Work Techniques**

Seventeen EFL teachers *(*n_{tg} = 9; n_{cg} = 8) stated that CLL involves student collaboration in pair or group settings. Six referred to distinct instructional techniques, including pair work (*n* = 2), team work (*n* = 2), and group work (*n* = 2). The following statements highlight the sub-conception**:** *Teacher 9* affirmed "Cooperative learning is the completion of tasks in interactive group compositions", and *Teacher 15* defined CLL as *"students work on pre-structured tasks in pair work or group work. […]"*. *Teacher 8* stated that CLL involves "*any method recommended by Norm Green* […]". This teacher had also participated in a CLL teacher training before the study took place.

- **Learning Goals and Learning Processes: Academic Learning**

Eight teachers *(*n_{tg} = 5; n_{cg} = 3) stressed that CLL can be used to work on academic tasks. The following statements illustrate the sub-conception: *Teacher 6* stated *"I understand it as ways of learning in which two or more students work together on the subject matter […]*". *Teacher 19* mentioned that "*[…] students have to work on a problem together*".

<u>Analyses of EFL Teachers' CLL Conceptions on the Posttest</u>

The following six sub-conceptions specified EFL teachers' CLL conceptions as an instructional technique and an instructional procedure on the posttest:

- **Sense of Authority: Learner-centered with Teacher Instruction**

Four teachers (n_{tg} = 2; n_{cg} = 2) spoke about autonomous student collaboration, including assistance and distribution of tasks in pair and group settings provided by the teacher, with little or no teacher support. The following comments support the sub-concept: *Teacher 15* stated "*Students work in pairs and small groups on an assignment, sort out steps of work and distribution of tasks, present a result." Teacher 7 stressed "*student autonomy (practice and presentation phase)".

- **Sense of Authority: Learner-centered with Teacher Support**

Three treatment group teachers gave emphasis to autonomous learning with teacher support (i.e., structuring learning conditions) that aims at academic and social learning. The following statement stresses the sub-concept: T*eacher 3* stated *"Students work together. Group members*

are assigned by certain methods so that social skills can take effect. Students work together who otherwise would hardly come into contact with each other […]."

- **Decision Making: Pair Work and Group Work Techniques**

Nine teachers (n_{tg} = 2; n_{cg} = 7) characterized CLL as instructional techniques in which two or more students work together. Four referred to pair and group work, one to pair and "tandem work", one to group work, and another to teamwork. The following statements exemplify the sub-conception**:** *Teacher 13* affirmed that CLL means *"[…] students learn together in pair work and group work forms of classroom arrangement […]". Teacher 16* classifies CLL as "*different forms of pair work/tandem work […]*".

- **Decision Making: Theory and Reflection**

Five treatment group teachers characterized CLL with regard to the conscious application of related instructional principles. The following statements emphasize the sub-conception: *Teacher 3* pointed out that learners are assigned to groups via "certain methods so that social skills can take effect". *Teacher 6* drew attention to two of the five basic elements, namely positive interdependence and individual accountability, by stating that "*Cooperation consists of the mutual responsibility for the learning result. The roles (Reader, Writer, Checker) support this as well as the fact that each group member should be able to present the results individually.*" *Teacher 1* highlighted the need to foster learners' social competencies by "[…] *taking into consideration mutual encouragement, praise, and acknowledgement of individual work contributions.*"

- **Learning Goals and Learning Processes: Academic Learning**

Seven teachers (n_{tg} = 2; n_{cg} = 5) expressed the view that CLL can be used to foster academic learning. One comparison group teacher considered social learning to occur automatically; another regarded it as very important. Two treatment group teachers stated that CLL provides very good conditions for mastery learning. The following comments illustrate the sub-conception: Te*acher 19* concluded *"In cooperative learning students support each other's learning by working together in pair work and group work. In that way, social learning is fostered as well*.", and T*eacher 11* affirmed "*A student-centered way of work that requires as*

many learning activities as possible in student groups and thus allows an optimal exploration of texts, materials/subject matter in general."

- **Learning Goals and Processes: Academic and Social Learning**

Four treatment group teachers stated that CLL aims at the development of academic and social competencies. The following statements prove the sub-conception: *Teacher 3* considered "*social and academic learning*" as the goal of CLL as did *Teacher 4* who defined CLL as "*social learning and learning of contents via cooperative methods*".

Analyses of EFL Teachers' CLL Conceptions on the Follow-up Test

The following six sub-conceptions defined EFL teachers' CLL conceptions as an instructional technique and an instructional procedure:

- **Sense of Authority: Learner-centered with Teacher Instruction**

Two statements by comparison group EFL teachers and one statement by a treatment group teacher addressed student collaboration in pair work or group work settings provided by the teacher who offers little support. The following statements support the sub-conception: *Teacher 14* pointed out that "Students work on tasks together in different groups […]." *Teacher 15* stated that *"Students work in groups/pair-groups, coordinate their work among themselves, conduct exercises and projects"*. A response by one treatment group teacher shows a misconception about the roles of learners and teachers in CLL. *Teacher 7* defined CLL as "Students disburden teachers/students help/teach students. The comment indicates that CLL is seen as an opportunity to release teachers from the responsibility of teaching by having learners teach each other.

- **Sense of Authority: Learner-centered with Teacher Support**

Six treatment group teachers emphasized learners' self-responsible, self-directed, division-of-labor interaction in CLL that is supported by the teacher who shares the authority for learning with the students. The following response serves as an example of the sub-conception: *Teacher 6* stated that *"The learning process should be successful for all small group members through self-responsible, autonomous-division of labor steps. […]*."

- **Decision Making: Pair Work and Group Work Techniques**

Six comparison group EFL teachers remarked that CLL involves pair work and group work settings. Three referred to joint learning, one to group work, and two to pair work and group work. The following statements emphasize the sub-conception**:** *Teacher 15* typified CLL as *"Students work in groups pair groups. […]"*, and *Teacher 19* wrote "*pair work, group work*".

- **Decision Making: Theory and Reflection**

Six treatment group teachers defined CLL in terms of instructional principles linked with the CLL concept presented in the training. The following statements illustrate the sub-conception**:** *Teacher 11* drew attention to implementing essential group processes by stating: "*A form of learning which aims at student autonomy and accountability by way of integrating group processes within the whole learning group.*" *Teachers 1, 5, 6, and 9* specified the use of the five basic elements. *Positive interdependence* was commented on by all four teachers. *Teacher 9* drew attention to the fact that students work toward "*common goals*". Teachers 1, 5, and 6 emphasized the division of tasks. *Teacher 5* affirmed that CLL implies"*[…] coming to a result through division of tasks*". *Individual accountability* was emphasized by *Teachers 6* and *11* who stated "*each member is accountable for the process […]*" (*Teacher 6*), and CLL "*aims at student autonomy and accountability by way of integrating group processes* […]" (*Teacher 11)*. *Teacher 6* stressed *group processing* by affirming *"[…] each member is accountable for the process and reflects on it regularly.*"

- **Learning Goals and Processes: Academic Learning**

Five teachers (n_{tg} = 2; n_{cg} = 3) indicated that CLL can be primarily used for academic or mastery learning. The following responses exemplify the sub-conception: *Teacher 16* considered CLL as "*joint work on learning contents"*, and *Teacher 9* stated "A learning group works in a coordinated/structured way toward common goals so that learning gains increase."

- **Learning Goals and Processes: Academic and Social Learning**

One treatment and one comparison group teacher (*Teacher 13*) expressed the idea that CLL aims at the development of social and academic skills. The following statement illustrates the sub-conception: *"conveying academic and social competencies" (Teacher 3*).

Table 7 presents EFL teachers' CLL conceptions and sub-conceptions on the three measures.

Table 7: Overview of EFL Teachers' CLL Conceptions on the Three Measures

Pretest $N = 19; n_{tg} = 11; n_{cg} = 8$		**Posttest** $N = 17; n_{tg} = 10; n_{cg} = 7$		**Follow-up test** $N = 14; n_{tg} = 8; n_{cg} = 6$	
Technique $n = 18$ ($n_{tg} = 11$; $n_{cg} = 7$)	Procedure $n = 1$ ($n_{cg} = 1$)	Technique $n = 10$ ($n_{tg} = 3$; $n_{cg} = 7$)	Procedure $n = 7$ ($n_{tg} = 7$)	Technique $n = 5$ ($n_{cg} = 5$)	Procedure $n = 8$ ($n_{tg} = 7$; $n_{cg} = 1$)
Sense of Authority					
Teacher instruction $n = 8$ ($n_{tg} = 6$; $n_{cg} = 2$)	Teacher support $n = 1$ ($n_{cg} = 1$)	Teacher instruction $n = 4$ ($n_{tg} = 2$; $n_{cg} = 2$)	Teacher support $n = 3$ ($n_{tg} = 3$)	Teacher instruction $n = 3$ ($n_{tg} = 1$; $n_{cg} = 2$)	Teacher support $n = 6$ ($n_{tg} = 6$)
Decision Making					
Prescribed techniques $n = 17$ ($n_{tg} = 9$; $n_{cg} = 8$)	Theory and reflection $n = 0$	Prescribed techniques $n = 9$ ($n_{tg} = 2$; $n_{cg} = 7$)	Theory and reflection $n = 5$ ($n_{tg} = 5$)	Prescribed techniques $n = 6$ ($n_{cg} = 6$)	Theory and reflection $n = 6$ ($n_{tg} = 6$)
Learning Goals and Process					
Academic $n = 8$ ($n_{tg} = 5$; $n_{cg} = 3$)	Academic and social $n = 0$	Academic $n = 7$ ($n_{tg} = 2$; $n_{cg} = 5$)	Academic and social ($n_{tg} = 4$)	Academic $n = 5$ ($n_{tg} = 2$; $n_{cg} = 3$)	Academic and social $n = 2$ ($n_{tg} = 1$; $n_{cg} = 1$)

3 Analyses of EFL Teachers' Cognitions

3.1 EFL Teachers' Intentions to Use CLL

Figure 1 presents the treatment group teachers' intentions to use CLL.

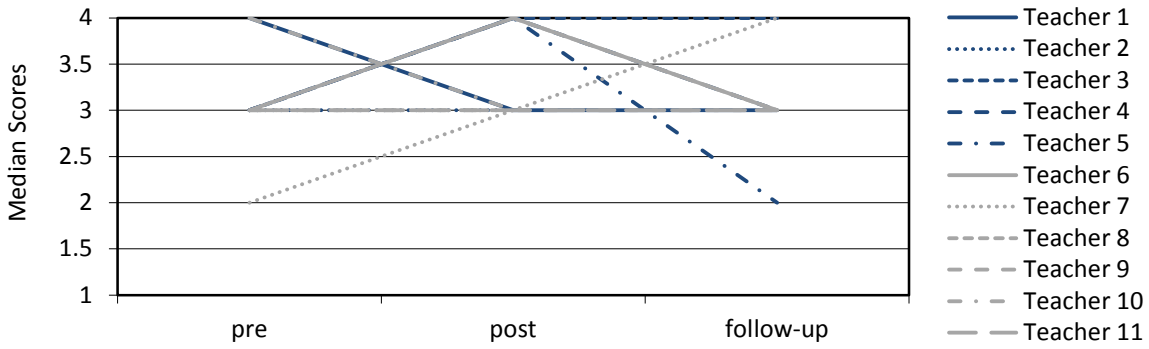


Figure 1: Intentions to Use CLL – Treatment Group

Figure 2 presents the comparison group teachers' intentions to use CLL.

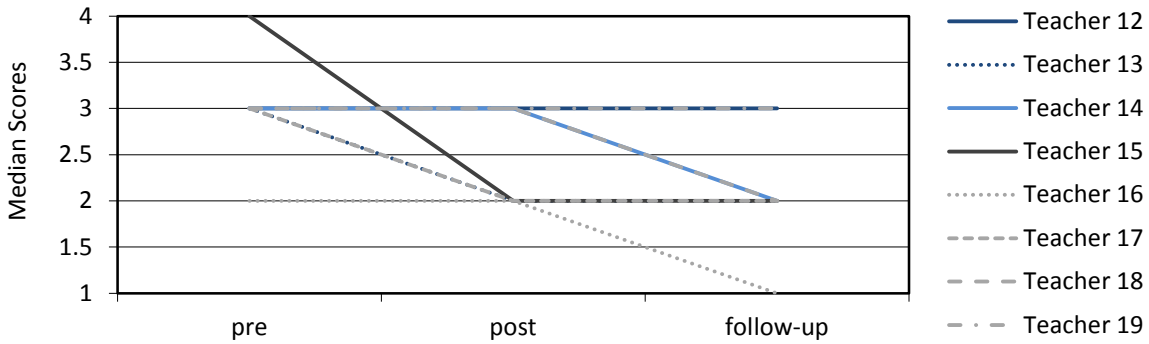


Figure 2: Intentions to Use CLL – Comparison Group

3.2 EFL Teachers' Attitudes toward CLL Use

Figure 3 presents the treatment group teachers' attitudes toward CLL use.

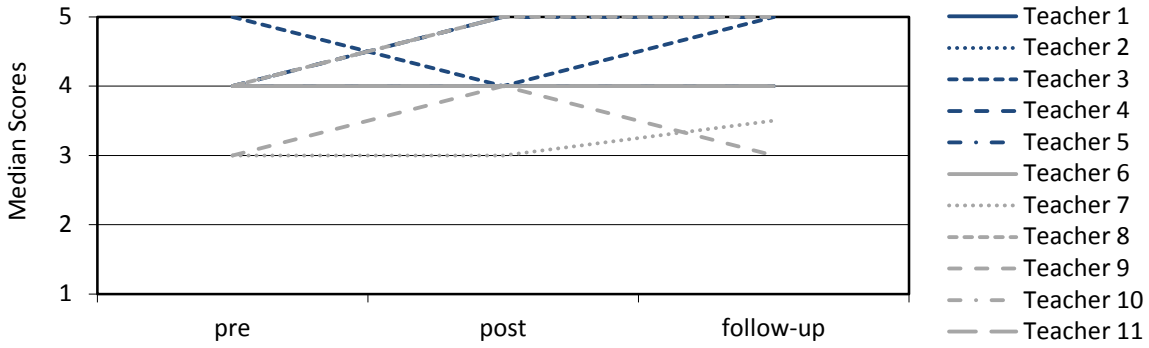


Figure 3: Attitudes toward CLL use – Treatment Group

Figure 4 presents the comparison group teachers' attitudes toward CLL use.

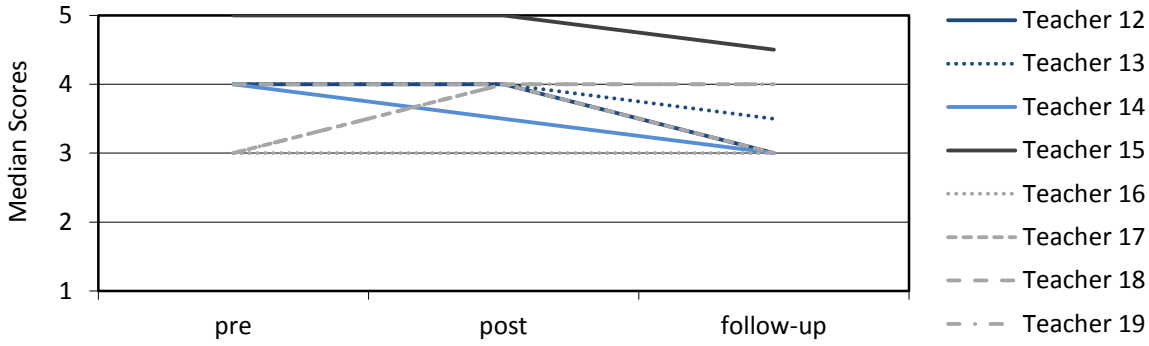


Figure 4: Attitudes toward CLL Use – Comparison Group

3.3 EFL Teachers' Perceived Subjective Norms toward CLL Use

Figure 5 presents the treatment group teachers' perceived subjective norms toward CLL use.

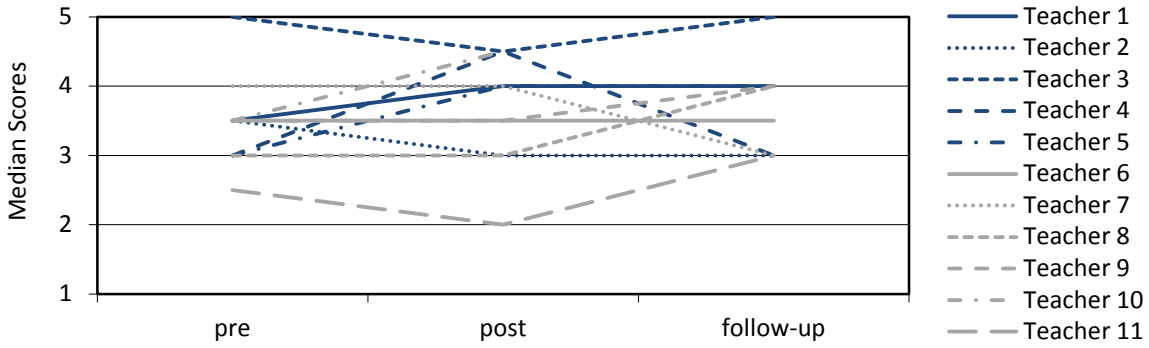


Figure 5: Subjective Norms toward CLL Use – Treatment Group

Figure 6 presents the comparison group teachers' perceived subjective norms toward CLL use.

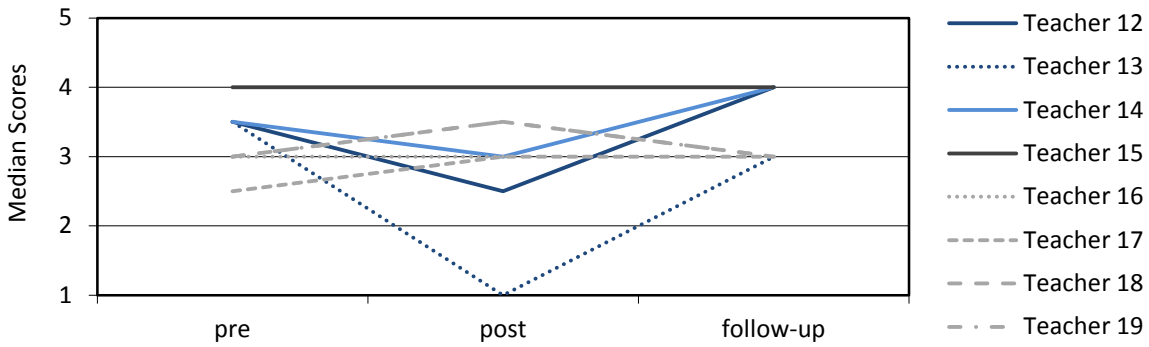


Figure 6: Subjective Norms toward CLL Use – Comparison Group

3.4 EFL Teachers' Sense of General Teaching Efficacy

Figure 7 presents the treatment group teachers' sense of general teaching efficacy.

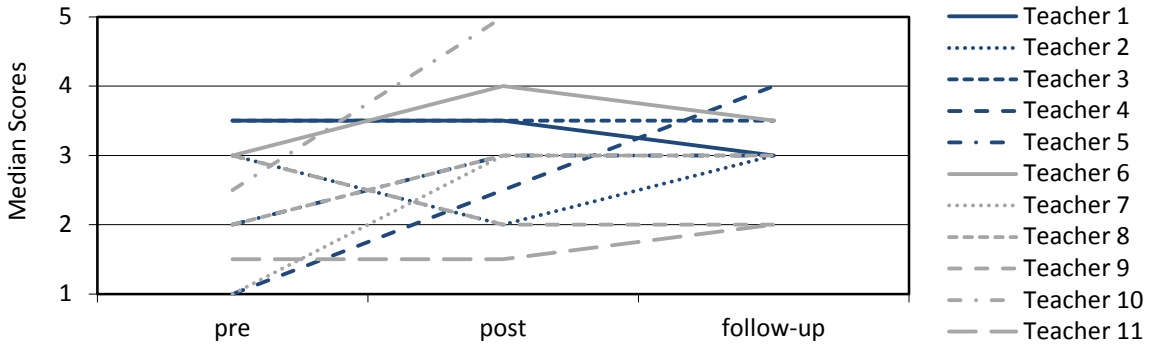


Figure 7: Sense of General Teaching Efficacy – Treatment Group

Figure 8 presents the comparison group teachers' sense of general teaching efficacy.

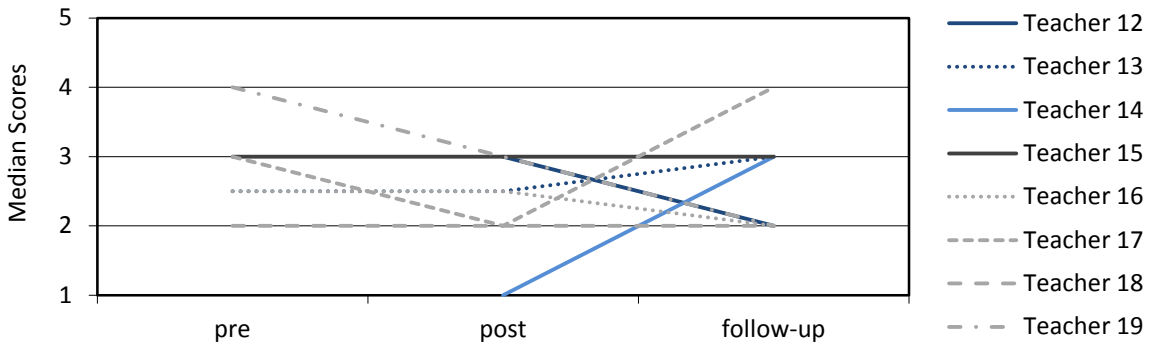


Figure 8: Sense of General Teaching Efficacy – Comparison Group

3.5 EFL Teachers' Sense of Personal Teaching Efficacy

Figure 9 presents the treatment group teachers' sense of personal teaching efficacy.

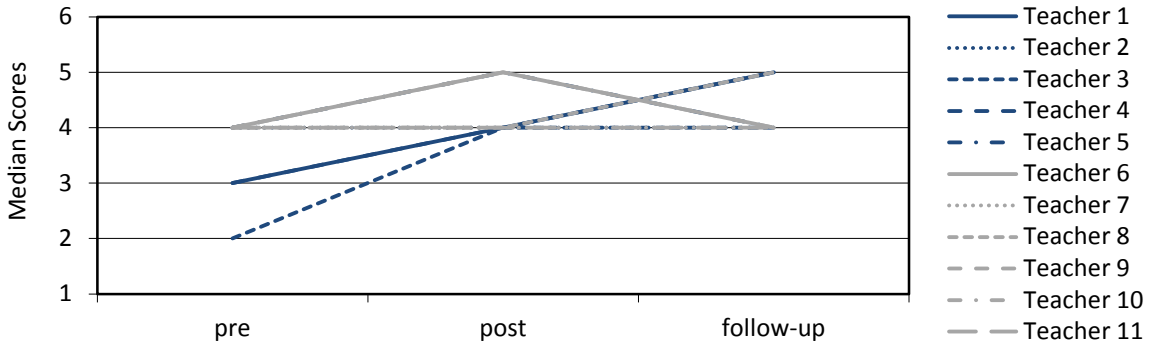


Figure 9: Sense of Personal Teaching Efficacy – Treatment Group

Figure 10 presents the comparison group teachers' sense of personal teaching efficacy.

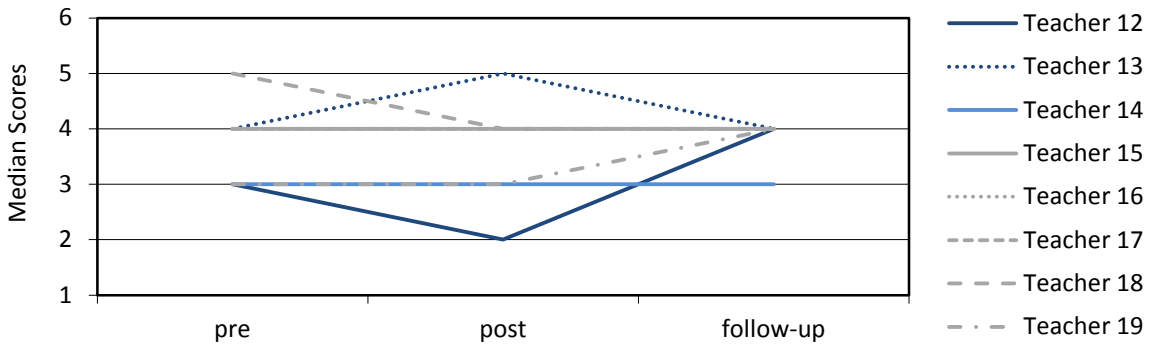


Figure 10: Sense of Personal Teaching Efficacy – Comparison Group

4 Analyses of EFL Teachers' Use of CLL Principles

4.1 Analyses of EFL Teachers' Use of CLL Principles on the Three Measures

Group Size

On the pretest, the treatment group EFL teachers indicated a moderate use of groups of two and three students, little use of groups of four, and very little use of groups of five, six or more students on the pretest. The comparison group EFL teachers designated a high use of groups of two, a moderate use of groups of three, little use of groups of four, as well as very little or no use of groups of five, six or more students (see Fig. 11).

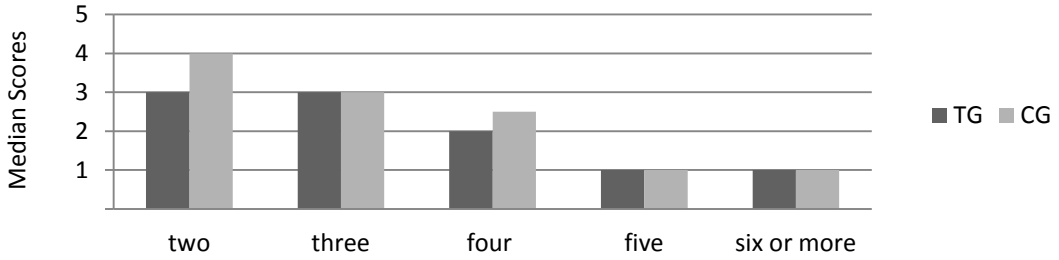


Figure 11: Group Sizes - Pretest

Note: EFL teachers' use of group sizes was measured by one item and five sub-items on a five-point scale. A median score of 4.5 or higher indicates a 'very high use' of the particular group size, 3.5 to 4 a 'high use', 2.5 to 3 a 'moderate use', 1.5 to 2 'little use', 1 'very little or no use'.

On the posttest, the treatment group EFL teachers indicated a high use of groups of two and three, a moderate use of groups of four, as well as very little or no use of groups of five and six or more students. The comparison group EFL teachers indicated a high use of groups of two and three, a moderate use of groups of four, and very little or no use of groups of five and six or more students (see Fig. 12).

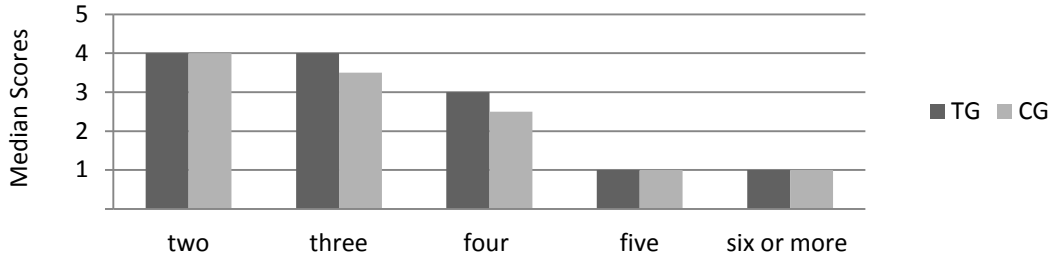


Figure 12: Group Sizes – Posttest

On the follow-up test, the treatment group EFL teachers indicated a high use of groups of two and three students, little use of groups of four, and very little or no use of groups of five, as well as six or more students. The comparison group EFL teachers reported a high use of groups of

two, a moderate use of groups of three and four, and little use of groups of five and six or more students (see Fig. 13).

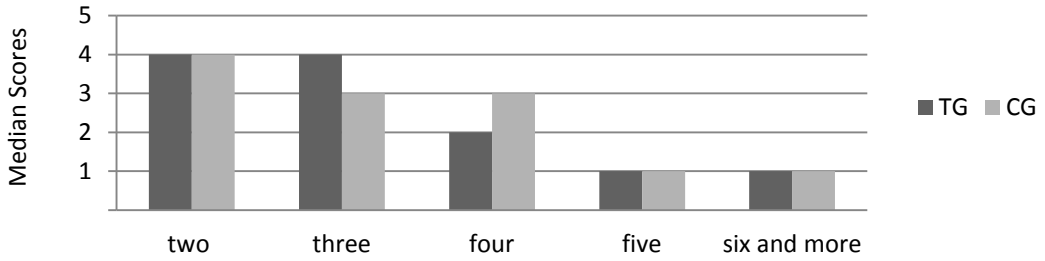


Figure 13: Group Sizes – Follow-up Test

Group Composition

On the pretest, the treatment group teachers reported a moderate use of group composition based on 'student decisions', 'different abilities', and 'random' assignment, and little use of assignment based on the 'same abilities'. The comparison group teachers indicated a high use of group composition based on 'student decisions', and a moderate use of group composition on the basis of the 'same' and 'different abilities' as well as 'random' assignment (see Fig. 14).

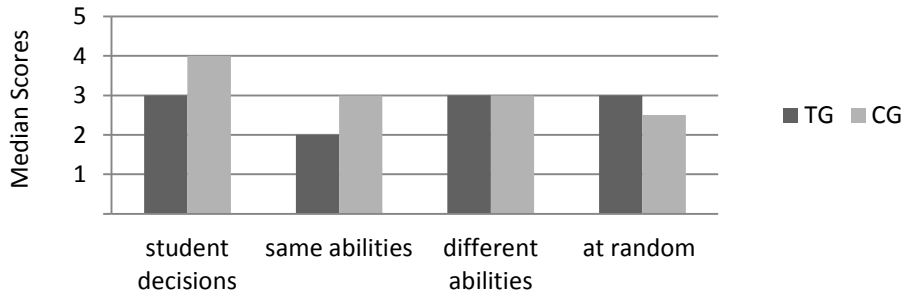


Figure 14: Group Composition – Pretest

Note: EFL teachers' use of group composition was tested by one item and four sub-items on a five-point scale. A median score of 4.5 or higher indicates a 'very high use' of the particular way of group composition, 3.5 to 4 a 'high use', 2.5 to 3 a 'moderate use', 1.5 to 2 'little use', 1 'very little or no use'.

On the posttest, the treatment group teachers reported a moderate use of group composition based on 'student decisions' and 'random' assignment, a high use of assignment by 'different abilities', and low use of assignment based on 'same abilities'. The comparison group EFL teachers indicated a high use of group composition based on 'student decisions', and a moderate use of assignment by the 'same abilities', 'different abilities', and 'random' assignment (see Fig. 15).

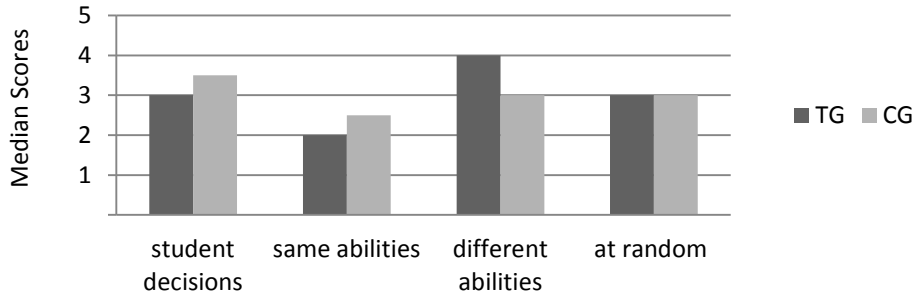


Figure 15: Group Composition – Posttest

On the follow-up test, the treatment group teachers indicated a moderate use of group composition based on 'student decisions' and 'different abilities', little use of assignment to the groups on the basis of the 'same abilities', and high use of 'random' assignment. The comparison group EFL teachers indicated a high use of group composition based on 'student decisions', a moderate use of assignment to groups on the basis of the 'same abilities', 'different abilities', and 'random' assignment (see Fig. 16).

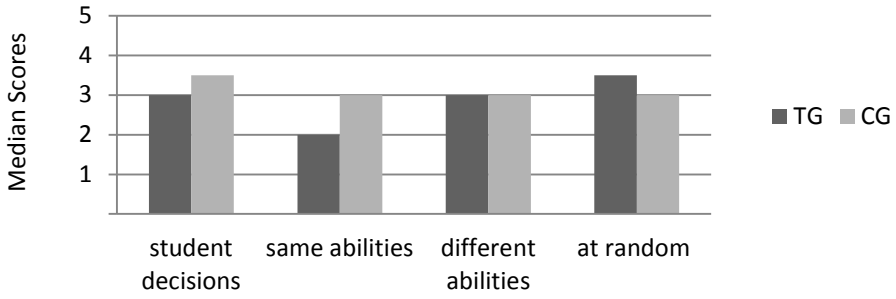


Figure 16: Group Composition – Follow-up Test

Positive Resource Interdependence

On the pretest, the treatment group teachers reported a high use of resource materials handed out 'per student' and 'group', and a moderate use of handing out 'part of the group material' to each student. The comparison group teachers indicated a moderate use of resources per 'student' and 'part of the group material' per student as well as a high use of resources 'per group' (see Fig. 17).

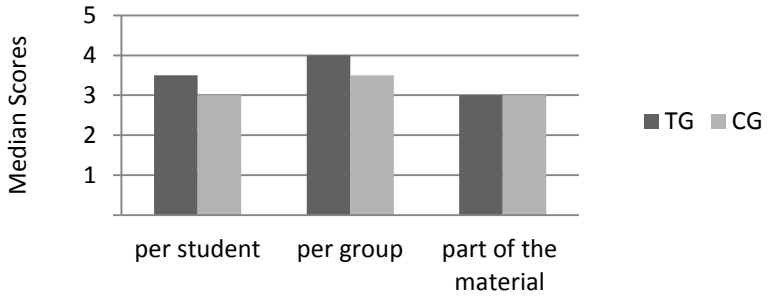


Figure 17: Positive Resource Interdependence – Pretest

Note: EFL teachers' use of positive resource interdependence was tested by one item and three sub-items on a five-point scale. A median score of 4.5 or higher indicates a 'very high use' of the particular way of handing out materials, 3.5 to 4 a 'high use', 2.5 to 3 a 'moderate use', 1.5 to 2 'little use', 1 'very little or no use'.

On the posttest, the treatment group teachers indicated a moderate use of resources handed out 'per student', a high use of resources 'per group' and 'part of the group material' per student. The comparison group teachers reported a moderate use of resources 'per student' and a high use of resources 'per group' as well as 'part of the group material' per student (see Fig. 18).

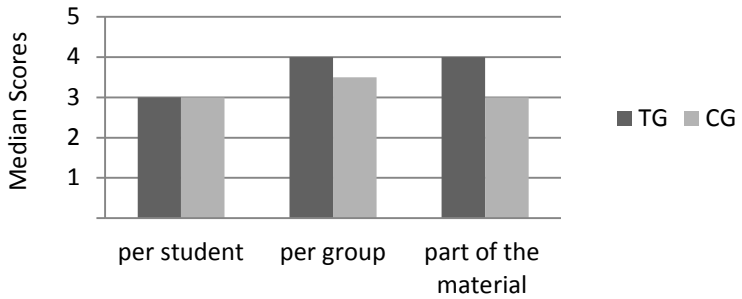


Figure 18: Positive Resource Interdependence – Posttest

On the follow-up test, the treatment group teachers stated a moderate use of resources handed out 'per student' and 'part of the group material' per student as well as a high use of resources 'per group'. The comparison group teachers indicated a moderate use of resources 'per student', resources 'per group', and 'part of the group material' per student (see Fig. 19).

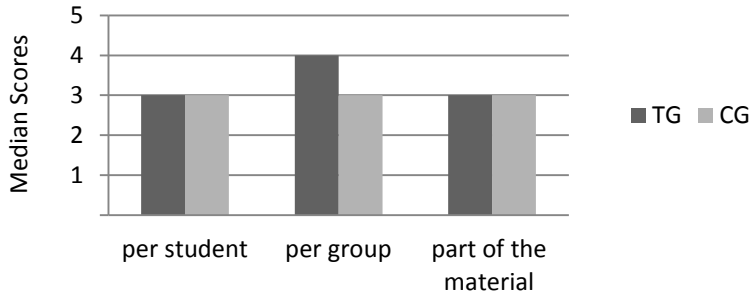


Figure 19: Positive Resource Interdependence – Follow-up Test

Positive Task Interdependence

On the pretest, the treatment group teachers indicated a moderate use of 'different tasks' and a high use of the 'same tasks'. The comparison group teachers reported a moderate use of 'different' and the 'same tasks' (see Fig. 20).

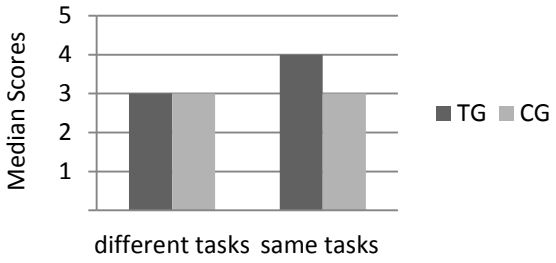


Figure 20: Positive Task Interdependence – Pretest

Note: EFL teachers' use of positive task interdependence was tested by one item and two sub-items on a five-point scale. A median score of 4.5 or higher indicates a 'very high use' of a particular task, 3.5 to 4 a 'high use', 2.5 to 3 a 'moderate use', 1.5 to 2 'little use', 1 'very little or no use'.

On the posttest, the treatment group teachers indicated a high use of 'different tasks' and little use of the 'same tasks'. The comparison group teachers reported a moderate use of 'different tasks' and a high use of the 'same tasks' (see Fig. 21).

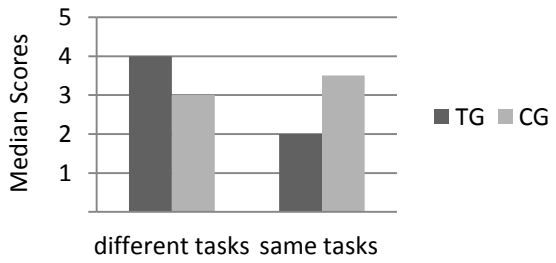


Figure 21: Positive Task Interdependence – Posttest

On the follow-up test, the treatment and comparison group EFL teachers reported a moderate use of 'different tasks' and the 'same tasks' (see Fig. 22).

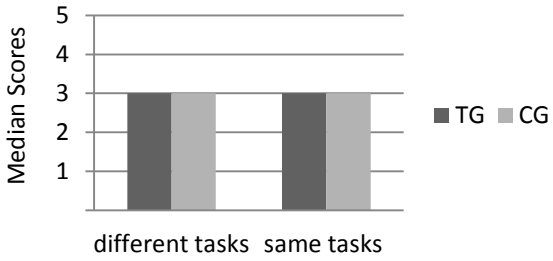


Figure 22: Positive Task Interdependence – Follow-up Test

Individual Accountability

With reference to *individual accountability* established by informing the students before they work in CLL groups of how their learning was to be assessed, the treatment and comparison group EFL teachers indicated a high use on the posttest (Mdn_{tg} =4.00, R_{tg} = 2 (min = 3; max = 5); Mdn_{cg} =4.00, R_{cg} = 2 (min = 3; max = 5) and a moderate use on the pretest and the follow-up test (pre: Mdn_{tg} = 3, R_{tg} = 4 (min = 1; max = 5); Mdn_{cg} = 3.00, R_{cg} = 4 (min = 1; max = 5); follow-up: Mdn_{tg} = 3.00, R_{tg} = 2 (min = 2; max = 4); Mdn_{cg} = 3.00, R_{cg} = 4 (min = 1; max = 5) (see Fig. 23).

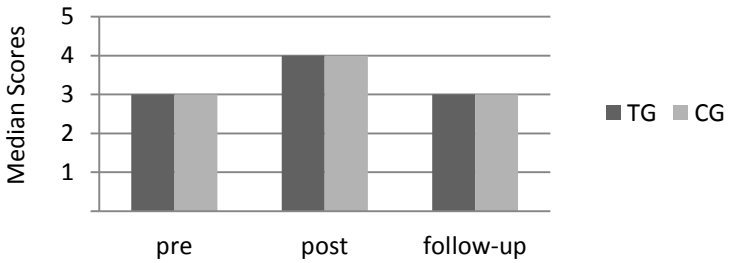


Figure 23: Individual Accountability – All Measures

Note: EFL teachers' use of individual accountability was tested by one item on a five-point scale. A median score of 4.5 or higher indicates a 'very high use' of announcing the way student learning will be assessed, 3.5 to 4 a 'high use', 2.5 to 3 a 'moderate use', 1.5 to 2 'little use', 1 'very little or no use'.

Face-to-Face Promotive Interaction (Room Arrangement)

On the pretest, the treatment group teachers indicated a very high use of 'close seating' of group members, a high use of 'paths' for the teacher to move between groups, as well as little use of 'enough room' between groups, and 'students decide' where to sit. The comparison group teachers reported a high use of 'close seating', a moderate use of 'enough room' between groups and 'students decide' where to sit, and a very high use of 'paths' for the teacher (see Fig. 24).

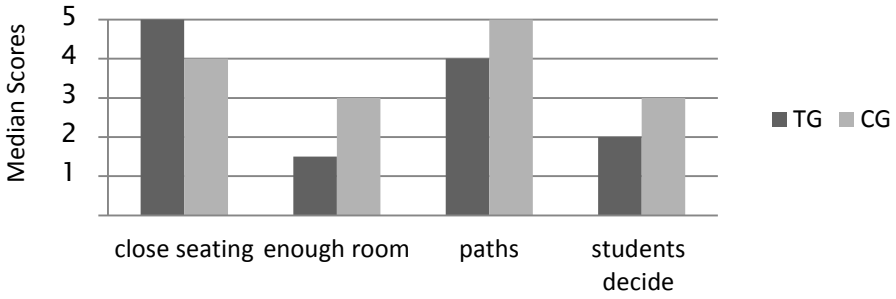


Figure 24: Face-to-Face Promotive Interaction (Room Arrangement) – Pretest

Note: EFL teachers' use of face-to-face promotive interaction via room arrangement was tested by four sub-items on a five-point scale. A median score of 4.5 or higher indicates a 'very high use' of the particular classroom arrangement, 3.5 to 4 a 'high use', 2.5 to 3 a 'moderate use', 1.5 to 2 'little use', 1 'very little or no use'.

On the posttest, the treatment group teachers indicated a very high use of 'close seating' of group members and 'paths' for the teacher to move between groups, as well as little use of 'enough room' between groups and 'students decide' where to sit. The comparison group teachers stated a very high use of 'close seating' of group members, a high use of 'paths' for the teacher, little use of 'enough room' between groups, and a moderate use of 'students decide' where to sit (see Fig. 25).

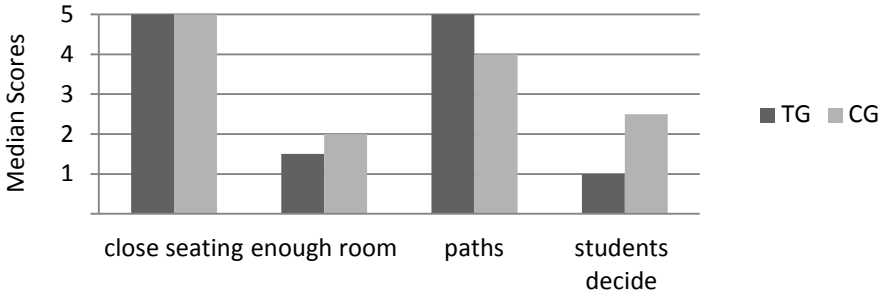


Figure 25: Face-to-Face Promotive Interaction (Room Arrangement) – Posttest

On the follow-up test, the treatment group teachers indicated a very high use of 'close seating' of group members and 'paths' for the teacher to move between groups, very little use or no use of 'enough room' between groups, as well as a moderate use of 'students decide' where to sit. The comparison group teachers reported a very high use of 'close seating' of group members, very little or no use of 'enough room' between groups, a high use of 'paths' for the teacher, and a moderate use of 'students decide' where to sit (see Fig. 26).

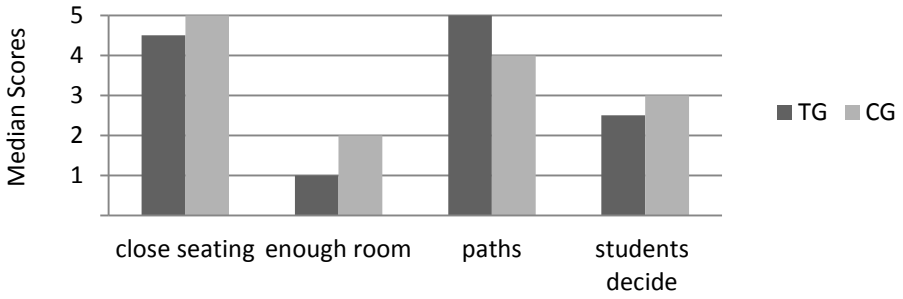


Figure 26: Face-to-Face Promotive Interaction (Room Arrangement) – Follow-up Test

Face-to-Face Promotive Interaction (Interaction)

On the pretest, the treatment group teachers indicated a moderate use of 'individual' work and 'cooperation' in groups, and very little or no use of 'competition' in groups. The comparison group teachers reported little use of 'individual' work and 'competition', and high use of 'cooperation' (see Fig. 27).

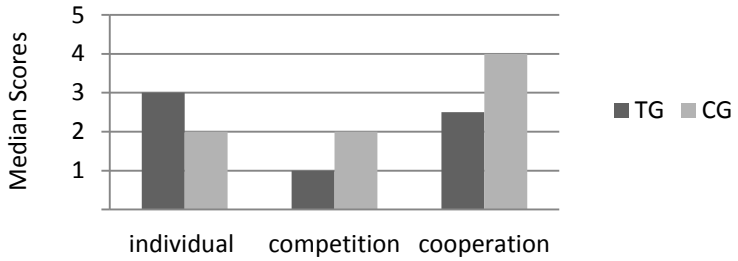


Figure 27: Face-to-Face Promotive Interaction (Interaction) – Pretest

Note: EFL teachers' use of face-to-face promotive interaction in terms of student interaction in CLL groups was tested by one item and three sub-items on a five-point scale. A median score of 4.5 or higher indicates a 'very high use' of the particular type of interaction, 3.5 to 4 a 'high use', 2.5 to 3 a 'moderate use', 1.5 to 2 'little use', 1 'very little or no use'.

On the posttest, the treatment group teachers reported little use of 'individual' work and 'competition' in groups, and a high use of 'cooperation' in groups. The comparison group teachers also indicated little use of 'individual' work and 'competition' in groups, and a high use of 'cooperation' in groups (see Fig. 28).

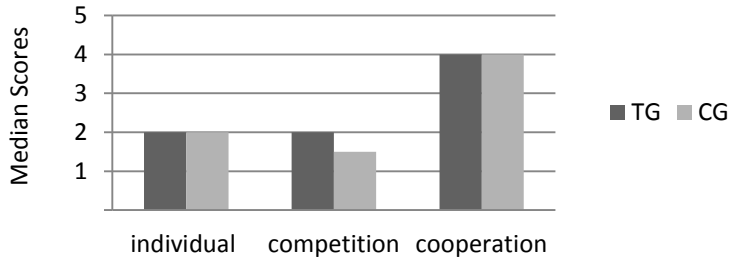


Figure 28: Face-to-Face Promotive Interaction (Interaction) – Posttest

On the follow-up test, the treatment group teachers indicated little use of 'individual' work and 'competition' in groups, and a high use of 'cooperation' in groups. The comparison group teachers reported a moderate use of 'individual' work, little use of 'competition' in groups, and a high use of 'cooperation' in groups (see Fig. 29).

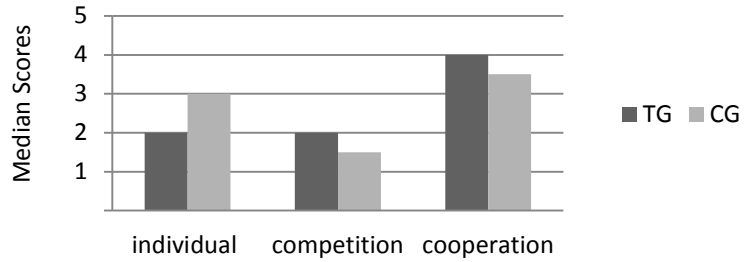


Figure 29: Face-to-Face Promotive Interaction (Interaction) – Follow-up Test

Social Language Skills

On the pretest, the treatment group teachers indicated a moderate use of all ways to promote learners' social language skills. The comparison group teachers reported little or no use of promoting social language skills by 'announcement' of the skills learners were required to use and providing 'little feedback' on learners' use of the skills, a high use of promoting social language skills through 'definition, practice, observation, and feedback', and a moderate use of 'definition, practice and observation' (see Fig. 30).

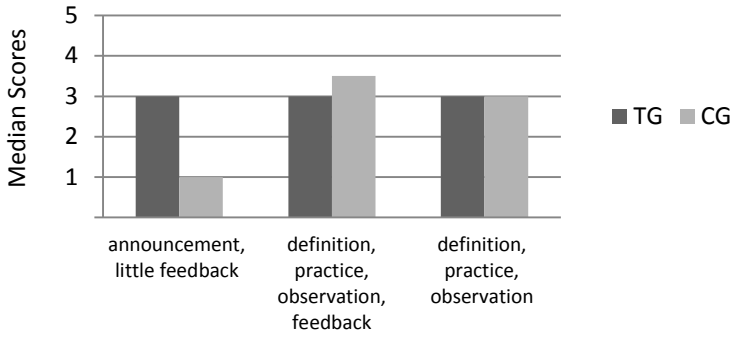


Figure 30: Social Language Skills – Pretest

Note: EFL teachers' use of social language skills was tested by one item and three sub-items on a five-point scale. A median score of 4.5 or higher indicates a 'very high use' of promoting students' social language skills in a particular way, 3.5 to 4 a 'high use', 2.5 to 3 a 'moderate use', 1.5 to 2 'little use', 1 'very little or no use'.

On the posttest, the treatment group teachers indicated little use of 'announcement, little feedback', and a moderate use of 'definition, practice, observation and feedback', as well as of 'definition, practice and observation'. The comparison group teachers reported a moderate use of all three ways to promote students' social language skills (see Fig. 31).

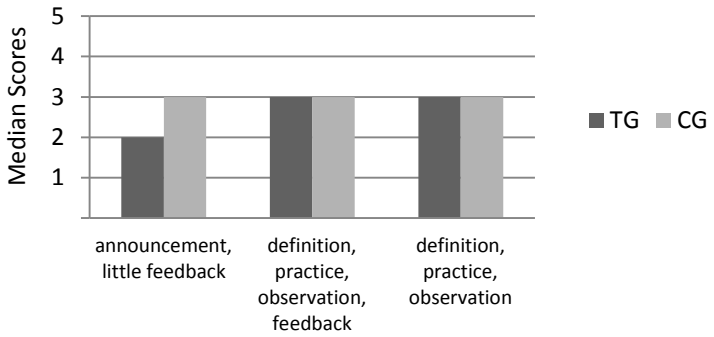


Figure 31: Social Language Skills – Posttest

On the follow-up test, the treatment group teachers indicated a moderate use of 'announcement, little feedback' as well as of 'definition, practice, and observation', and a high use of 'definition, practice, observation and feedback'. The comparison group teachers stated little use of 'announcement, little feedback', a high use of 'definition, practice, observation and feedback', a moderate use of 'definition, practice and observation' (see Fig. 32).

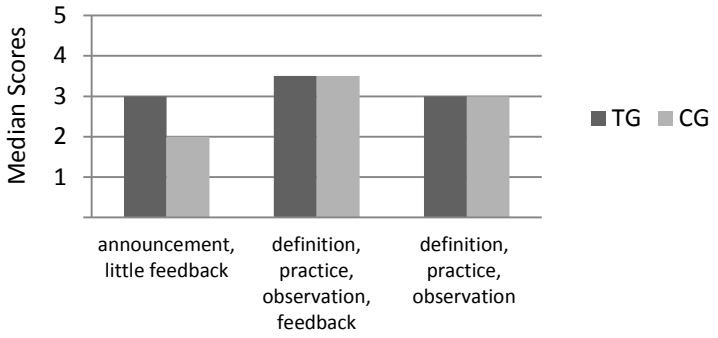


Figure 32: Social Language Skills – Follow-up Test

Group Processing

On the pretest, the treatment group teachers indicated little use of 'no time for reflection', a moderate use of 'student discussion' of the processes, and very little or no use of 'structured methods' and group processing as 'part of the lesson'. The comparison group teachers reported a moderate use of 'no time for reflection' and 'student discussion', as well as little use of 'structured methods' and group processing as 'part of the lesson' (see Fig. 33).

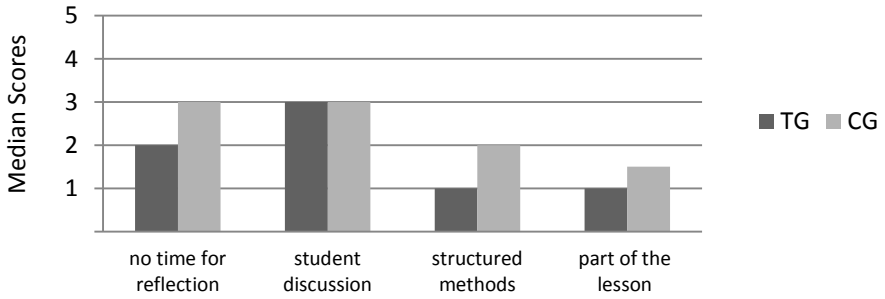


Figure 33: Group Processing – Pretest

Note: EFL teachers' use of group processing was tested by one item and four sub-items on a five-point scale. A median score of 4.5 or higher indicates a 'very high use' of the particular way of group processing, 3.5 to 4 a 'high use', 2.5 to 3 a 'moderate use', 1.5 to 2 'little use', 1 'very little or no use'.

On the posttest, the treatment group teachers indicated little use of 'no time for reflection' and of 'part of the lesson', and a moderate use of 'student discussion' and 'structured methods'. The comparison group teachers reported a moderate use of 'no time for reflection' and 'student discussion', and little use of 'structured methods' and group processing as 'part of the lesson' (see Fig. 34).

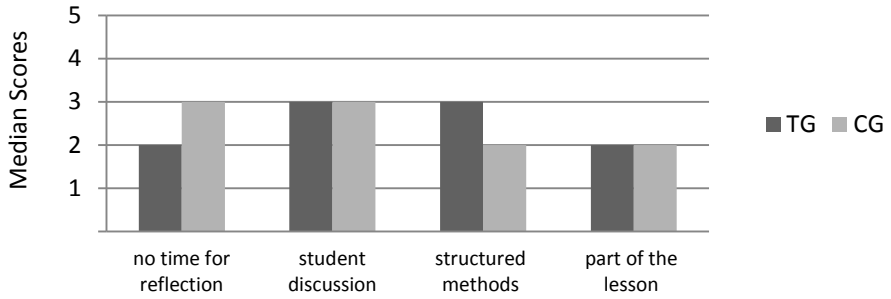


Figure 34: Group Processing – Posttest

On the follow-up test, the treatment group teachers indicated a moderate use of 'no time for reflection', 'student discussion' and 'part of the lesson', and little use of 'structured methods'. The comparison group teachers reported little use of 'no time for reflection', 'structured methods' and 'part of the lesson', as well as a moderate use of 'student discussion' (see Fig. 35).

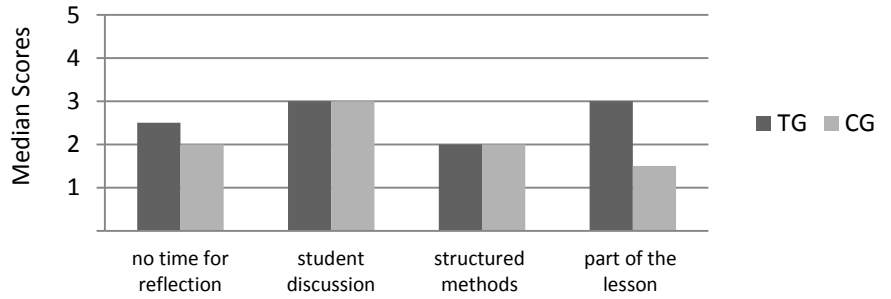


Figure 35: Group Processing – Follow up Test

Teachers' Instructional Behavior

On the pretest, the treatment group teachers reported little use of 'no interventions', and a high use of 'frequent interventions' and of 'occasional interventions'. The comparison group teachers indicated the same (see Fig. 36).

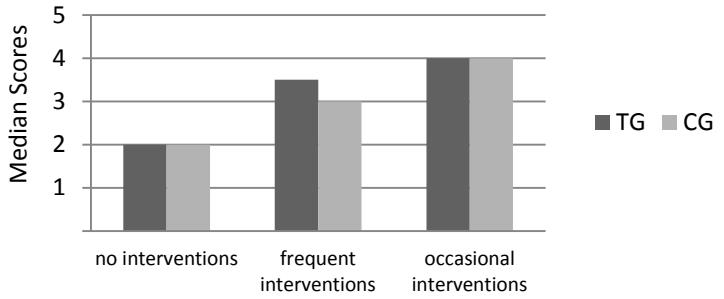


Figure 36: Teachers' Instructional Behavior – Pretest

Note: EFL teachers' use of instructional behavior was tested by one item and four sub-items on a five-point scale. A median score of 4.5 or higher indicates a 'very high use' of the particular way of intervening, 3.5 to 4 a 'high use', 2.5 to 3 a 'moderate use', 1.5 to 2 'little use', 1 'very little or no use'.

On the posttest, the treatment group teachers indicated a moderate use of 'no interventions', and a high use of 'frequent interventions' and 'occasional interventions'. The comparison group teachers indicated little use of 'no interventions', a moderate use of 'frequent interventions', and a high use of 'occasional interventions' (see Fig. 37).

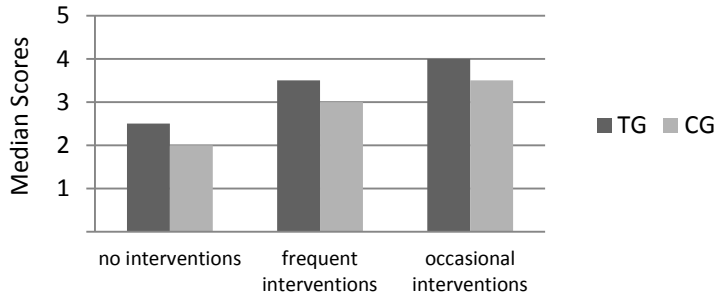


Figure 37: Teachers' Instructional Behavior – Posttest

On the follow-up test, the treatment group teachers reported little use of 'no interventions', a moderate use of 'frequent interventions', and a high use of 'occasional interventions'. The comparison group teachers indicated a moderate use of 'no interventions' and 'frequent interventions', as well as a high use of 'occasional interventions' (see Fig. 38).

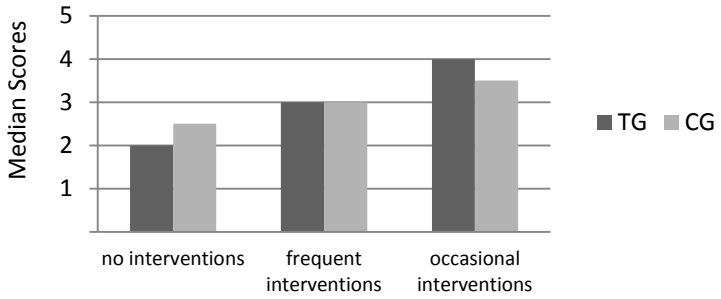


Figure 38: Teachers' Instructional Behavior – Follow-up Test

4.2 Valid and Missing Data – Treatment Group

Table 8 provides an overview of valid and missing data of the treatment group teachers' use of CLL principles on the three measures.

Table 8: Valid and Missing Data - Treatment Group Teachers' Use of Instructional Principles

Item and sub-items	Valid data			Missing data		
	pre	post	fo-up	pre	post	fo-up
Group size						
• two	10	10	8	1	1	3
• three	9	11	9	2	0	2
• four	10	11	7	1	0	4
• five	10	10	7	1	1	4
• six or more	10	10	7	1	1	4
Group composition						
• students decide	11	11	9	0	0	2
• same abilities	10	11	9	1	0	2
• different abilities	8	11	10	3	0	1
• at random	10	11	10	1	0	1
Positive resource interdependence						
• materials per student	8	11	8	3	0	3
• materials per group	10	11	9	1	0	2
• part of the material	10	11	9	1	0	2
Positive task interdependence						
• different tasks	8	11	10	3	0	1
• same tasks	10	11	10	1	0	1
Individual accountability	8	11	9	3	0	2
Face-to-face promotive interaction (room arrangement)						
• close seating	10	11	10	1	0	1
• enough room	10	10	10	1	1	1
• paths	11	11	10	0	0	1
• students decide	10	11	10	1	0	1
Face-to-face promotive interaction (interaction)						
• individual	8	11	9	3	0	2
• competition	9	9	9	2	2	2
• cooperation	10	11	9	1	0	2
Social language skills						
• announcement and little feedback	10	11	10	1	0	1
• definition, practice, observation, feedback	11	11	10	0	0	1
• definition, practice, observation	11	10	10	0	1	1
Group processing						
• no time for reflection	10	11	10	1	0	1
• student discussion	10	11	10	1	0	1
• structured methods	9	11	9	2	0	2
• part of the lesson	9	11	10	2	0	1
Teachers' instructional behavior						

• no interventions	9	10	10	2	1	1
• frequent interventions	8	10	10	3	1	1
• occasional interventions	11	10	10	0	1	1

4.3 Valid and Missing Data – Comparison Group

Table 9 provides an overview of valid and missing data of the comparison group teachers' use of CLL principles on the three measures.

Table 9: Valid and Missing Data - Comparison Group Teachers' Use of Instructional Principles

Item and sub-items	Valid data			Missing data		
	pre	post	fo-up	pre	post	fo-up
Group size						
• two	8	8	8	0	0	0
• three	8	8	8	0	0	0
• four	8	8	8	0	0	0
• five	8	7	8	0	1	0
• six or more	8	7	8	0	1	0
Group composition						
• students decide	7	8	8	1	0	0
• same abilities	7	8	8	1	0	0
• different abilities	7	8	8	1	0	0
• at random	8	8	7	0	0	1
Positive resource interdependence						
• materials per student	8	8	8	0	0	0
• materials per group	8	8	8	0	0	0
• part of the material	8	7	8	0	1	0
Positive task interdependence						
• different tasks	8	8	8	0	0	0
• same tasks	8	8	8	0	0	0
Individual accountability	7	7	8	1	1	0
Face-to-face promotive interaction (room arrangement)						
• close seating	7	8	8	1	0	0
• enough room	7	8	8	1	0	0
• paths	8	8	8	0	0	0
• students decide	8	8	8	0	0	0
Face-to-face promotive interaction (interaction)						
• individual	7	8	8	1	0	0
• competition	6	8	8	2	0	0
• cooperation	8	8	8	0	0	0
Social language skills						
• announcement and little feedback	7	7	8	1	1	0
• definition, practice, observation, feedback	8	7	8	0	1	0
• definition, practice, observation	6	7	8	2	1	0
Group processing						
• no time for reflection	7	7	7	1	1	1

• student discussion	7	7	8	1	1	0
• structured methods	7	7	8	1	1	0
• part of the lesson	8	7	8	0	1	0
Teachers' instructional behavior						
• no interventions	7	7	8	1	1	0
• frequent interventions	7	7	8	1	1	0
• occasional interventions	8	8	8	0	0	0

5 Analyses of EFL Teachers' Sense of Actual Behavioral Control

5.1 Teacher Responses – Sense of Actual Behavioral Control

Table 10 presents EFL teachers' perceptions of actual behavioral control. The data was gathered on the second follow-up test.

Table 10: EFL Teachers' Sense of Actual Behavioral Control

EFL Teacher	Veränderungen/Hilfen Changes/Aid	Probleme/Grenzen Problems/Limitations
1 (TG) German	kleinere Gruppen, kontinuierliches Arbeiten, Zusammenarbeit mit Kollegen	Konflikte zwischen den Schülern – mangelnde Bereitschaft mit bestimmten Schülern zusammen zu arbeiten – Äußere Bedingungen wie Praktika- Vertretungsunterricht – Konzentrationsschwächen der Schüler
English	smaller groups, continuous work, cooperation with colleagues	conflicts between students - no willingness to work together with certain students – external conditions such as internships – substitute teaching – lack of concentration by students
2 (TG) German	mögl. Hospitationen untereinander, "refresher" für Lehrkräfte	häufige Stundenplanänderungen, Konzentrationsprobleme bei den Schülern, Weigerung mit bestimmten Mitschülern zu arbeiten
English	possible observations of each other's lessons, "refresher" for teachers	numerous schedule changes, concentration problems by students, refusal to work with certain students
3 (TG)	—	—
4 (TG) German	regelmäßiger Austausch mit Jahrgangskollegen/Fachkollegen, weitere methodische Anregungen	organisatorische Hindernisse, z.B. häufiger Vertretungsunterricht zu Lasten von Fachunterricht, Disziplinprobleme/Störungen bzw. mangelnde Bereitschaft zur Mitarbeit
English	continuous exchange with age-group colleagues/subject colleagues, further methodological suggestions	organizational boundaries, e.g., a lot of substitute teaching to the detriment of subject instruction, discipline problems/disturbances, lack of willingness to participate
5 (TG) German	kleinere Gruppen bzw. Gruppenräume, Auffrischungskurse in cooperative learning, Zeit sich gegenseitig zu hospitieren	nicht genügend Platz im Klassenraum (bei 26 Schülern) → circle, Einbeziehung eines autistischen Schülers (Asperger Syndrom), ADHS-Kinder, die erhebliche Konzentrationsschwierigkeiten haben (z.B.

	Training der Schüler „step by step“	pairs check), überraschende Änderungen des Stundenplans durch fehlende Lehrer
English	smaller groups and group rooms, refresher courses in cooperative learning, time to observe each other Training of students “step by step”	not enough room in the classroom (with 26 students) → circle, inclusion of an autistic student (Asperger Syndrome), ADHD-children, who have considerable concentration difficulties (e.g. pairs check), surprising changes of the schedule because of missing teachers
6 (TG) German	Mehr Zeit für detaillierte Planung im Sinne von Anpassung des Inhalts und der Methoden aneinander bzw. Festlegung von Gruppen/ Rollen/Schritten/ Wechseln etc., die Möglichkeit, mit Kolleginnen parallel arbeiten und gemeinsam planen zu können	Referate nehmen viel individuelle Zeit, die für Gruppenphasen fehlt, Material der Verlage muss zu stark umgebaut werden, Curricula lassen zu wenig Raum, Schüler/innen sind nicht kooperative sozialisiert (alles immer von Anfang), Gremienarbeit und politische Lage fressen Zeit & Motivation
English	More time for detailed planning in terms of adjustment of the content and the methods to one another, determination of groups/roles/steps/changes etc., the possibility to work and plan together with colleagues simultaneously.	Presentations take up much individual time, which is then missing for the group phases, materials from the publishers need to be modified too much, curricula leave too little room, students are not cooperatively socialized (always have to start from the beginning again), committee work and political situation eat up time & motivation.
7 (TG) German	größere Methodenvielfalt, mehr Arbeitsteilung/Kooperation mit „Leidensgenossen“/Kollegen, klassenübergreifender Unterricht, Einstellungsänderungen der Schüler/Kooperation ≠ Laber- und Ausruhstunde	Stundenplanänderungen, Verwaltungsaufgaben, Boykott durch die Schülerschaft, Mangel an passendem Material
English	bigger diversity of methods, more division of labor/cooperation with “companions of misfortune”/colleagues, across-the-board instruction, attitude changes by students/cooperation ≠ joshing –and chilling lesson.	schedule changes, administrative tasks, boycott by students, lack of suitable materials

8 (TG) German	mehr Ruhe, mehr Planbarkeit, bzw. auch im Hinblick auf Nutzung der Räume (Ruhe/Zeit bei der Bearbeitung des Stoffes)	s.o. Anmerkungen zur Bearbeitung des Stoffes trifft besonders in Jg. 7 zu; PS: Im Ganzen bin ich der Überzeugung, dass kooperative Lernformen möglichst früh (bei uns z.B. in Kl. 5) eingeführt und zur Routine gemacht werden müssen, um langfristig regelmäßig und erfolgreich eingesetzt werden zu können. Ich werde das jedenfalls probieren.
English	less noise, more time to plan also with regard to use of the rooms (less noise/time to work on subject matter)	see above, comments on work on subject matter mostly applies to year 7; PS: Altogether I am convinced that cooperative ways of learning need to be introduced as early as possible (for use e.g., in grade 5) and become a routine
9 (TG) German	etablierter/organisierter Austausch mit Fachkollegen, gegenseitige Hospitationen ermöglichen, regelmäßige Auffrischung der erlernten Methoden zum KL, mehr Raumfreiheit, weniger Stofffülle	Prüfungsanforderungen/zu unterrichtender Stoff, Schüler sind oft auch außerschulisch unterwegs (z.B. Termine zur Berufsvorbereitung), 45 min-Takt, unterschiedliche Lernniveaus (Heterogenität)
English	established/organized exchange with colleagues, make it possible to observe each other's lessons, continuous refreshing of learned methods of CL, more room freedom, less subject matter	requirements/subject matter to be covered, students are often have extracurricular activities (e.g., appointment for career counselling), 45-min cycle, different learning levels (heterogeneity)
10 (TG)	—	—
11 (TG) German	größere Räume, mehr Zeit für Unterrichtsplanung und Organisation	—
English	bigger rooms, more time for lesson planning and organization	—

5.2 Coding System for Analyses of Teachers' Sense of Actual Behavioral Control

Table 11 presents the coding system for the analyses of teachers' sense of actual behavioral control.

Table 11: Coding System for EFL Teachers' Sense of Actual Behavioral Control

Factors that facilitate or impede CLL use	Key example	Coding rules	Categorization of factors
Resources: having available resources (funding, curriculum materials, supplies, etc.)	*lack of suitable materials*	criteria of resources	facilitating (1) impeding (2)
Staff development opportunities: staff development opportunities on CLL	*continuous "refreshing" of learned methods of CLL*	criteria of staff development opportunities	
Testing and assessment: less emphasis on testing and assessment	*requirements/subject matter to be covered*	criteria of testing and assessment	
Collegial support: collegial support and cooperation	*cooperation with colleagues*	criteria of collegial support	
Curriculum ideas: curriculum ideas for CLL	*further methodological suggestions*	criteria of curriculum ideas	
Administrative support: opportunities for observing other teachers' lessons	*possible observations of each other's lessons*	criteria of administrative support	
Time: time to plan and use CLL	*more time for lesson planning and organization*	criteria of time	
Classroom space and arrangement: classroom space and arrangements that facilitate CLL	*bigger rooms*	criteria of classroom space and arrangement	
Class size: smaller classes of students	*smaller groups*	criteria of class size	
Student competencies: students who have cooperative skills	*conflicts between students - no willingness to work together with certain students; lack of concentration*	criteria of student competencies	
School organization: less organizational changes and more flexible time frames	*organizational boundaries, e.g., a lot of substitute teaching […]; 45-min cycle*; committee work […] eat[s] up time and motivation	criteria of school organization	

5.3 EFL Teachers' Perceptions of Actual Behavioral Control

Table 12 displays the treatment group EFL teachers' perceptions of actual behavioral control to use CLL in the EFL classroom.

Table 12: EFL Teachers' Perceptions of Actual Behavioral Control

Concept	Sub-concept	Criteria	Frequency
Contextual conditions that facilitate CLL use	Staff development opportunities	*continuous "refreshing" of learned methods of CLL*	3
	Collegial support	*cooperation with colleagues*	5
	Curriculum ideas	*further methodological suggestions*	2
	Administrative support	*possible observations of each other's lessons*	3
	Time	*more time for lesson planning and organization*	3
	Classroom space and arrangements	*bigger rooms*	4
	Class size	*smaller groups*	2
Contextual conditions that impede CLL use	Resources	*lack of suitable materials*	2
	Testing and assessment	*requirements/subject matter to be covered*	3
	Student competencies	*conflicts between student - no willingness to work together with certain students; lack of concentration; different learning levels (heterogeneity)*	9
	School organization	*organizational boundaries, e.g., a lot of substitute teaching on account of subject instruction; 45-min cycle; committee work and political situation eat up time and motivation*	9

6 EFL Teachers' Perceptions of the Training Quality

6.1 Teacher Responses – Quality of the Training

Table 13 displays teachers' perceptions of the training. The data was gathered on the posttest.

Table 13: EFL Teachers' Perceptions of Training Quality - Training Evaluation

EFL Teacher	German Response	English Response
1 (TG)	Mir hat ganz besonders die positive Atmosphäre gefallen. Die Teilnehmer haben sich gegenseitig ermuntert und bestärkt. Es hat auch ein regelmäßiger Erfahrungsaustausch stattgefunden.	I particularly liked the positive atmosphere. The participants encouraged and supported each other. There was also a regular exchange of experiences.
2 (TG)	☺ Thank you. Using the English language was not always the easiest thing. Nie wieder direkt im Anschluss.	☺ Thank you. Using the English language was not always the easiest thing. Never again directly afterwards.
3 (TG)	Es war ein super-lehrreicher Lehrgang, eine total angenehme Arbeitsatmosphäre, eine souveräne und liebenswerte Moderatorin. Der Lehrgang hat mich neu motiviert, ich war voller Ideen für den/ die nächsten/ nächsten Tag(e). Und ich war – dank der guten Anleitung durch Fr. Meyer sehr erfolgreich. Danke, liebe Gesa.	It was a super-informative course, a totally pleasant working atmosphere, a competent and lovely presenter. The course newly motivated me, I was filled with ideas for the next/next day(s). And I was – due to the good guidance by Ms. Meyer – very successful. Thank you, dear Gesa.
4 (TG)	—	—
5 (TG)	—	—
6 (TG)	Vor allem der „frische Wind" in den Klassen + im Lehrerzimmer haben uns überzeugt.	Above all the „fresh wind" in the classes + in the teachers' lounge convinced us.
7 (TG)	—	—
8 (TG)	—	—
9 (TG)	Thank you!	Danke!
10 (TG)	—	—
11 (TG)	—	—

6.2 Teacher Responses – Quality of each Training Session

Table 14 to 19 present the EFL teachers' perceptions of the quality of each training session. The data was gathered after every training session.

Table 14: EFL Teachers' Perceptions of Training Session One

	Teacher Responses
Content	• I don't know how to realize it in my class. • Start punctually, don't wait for the last one to appear. • My level of concentration was too low. The text was quite complex and therefore it was difficult to "learn" the single steps. • I find it rather helpful that our session was kept in English. • Learning AND implementing the method at the same time caused some information gaps but I'm sure the handouts will help here.
Usefulness	• The experience of being a group member is important. • I can say more after I've tried the methods with my learning group. • It's definitely a beginning. Yet, for forceful implementation I'll have to wait for more input & try-out sessions to have some material to go on. • I would have liked to work on some kind of example how to implement the TPS-method in my teaching.

Table 15: EFL Teachers' Perceptions of Training Session Two

	Teacher Responses
Content	• Piaget and Vygotsky are not my favorites. They are not so important for my school days. • ☺ • very theoretical English • It was very difficult to understand. • nice exchange of ideas – teachers never stop talking – sorry • The theoretical input was a bit too complex (reading the texts at 5 o'clock). I had a lack of concentration. • really learnt a lot and connected it to previously learnt items
Usefulness	• We have tried to find examples. • We are working on an idea for lessons coming on soon. • I'd like to practice some methods …

Table 16: EFL Teachers' Perceptions of Training Session Three

	Teacher Responses
Content	• positive loaded when you go home/new energy for teaching in a better way • useful for daily work • It helps very much to plan a lesson together and to explain it to the others. • too much time, but very good ideas for our lessons in the classroom • good, interesting methods and ideas • Training sessions ought to take place in the morning. • time setting was unfortunate (too late start); grammar was a little dodgy to do, lesson planning was extremely useful • It was very helpful because I could plan my lesson with other colleagues and got new ideas from them.
Usefulness	• use it without too many preparations • intensive discussion with partner/talking about "practical work", enjoyed the lesson very much • It has to be changed a little bit because of the numbers of students. • See above (time setting was unfortunate (too late start); grammar was a little dodgy to do, lesson planning was extremely useful) • It was very helpful, because I could plan my lesson with other colleagues and got new ideas from them.

Table 17: EFL Teachers' Perceptions of Training Session Four

	Teacher Responses
Content	• I was not so involved as I should have been because of a lot of other tasks at the same day. • It's difficult to teach.
Usefulness	• I'm very happy to learn about the methods and I really use them. It helps me a lot to have good lessons, a good atmosphere. • Social skills are evident for every lesson. Without it's not possible to learn and improve. • Social skills are more important than academic. • It's really nice to take part in this seminar and I do hope, no –I'm sure that I'll implement more + more of these skills.

Table 18: EFL Teachers' Perceptions of Training Session Five

	Teacher Responses
Content	• teacher's role and behavior is very important + positive thinking (I/we often don't do this.) • practical doing and visualizing is always good • It is important to encourage oneself by thinking positive. • not so much new stuff, a lot of revision and reflection • I couldn't see why we talked about self-verbalization all the time. • I filled some gaps and got new ideas (e.g. connecting methods)
Usefulness	• difficult to do role play • It helps to reflect about the goals you want to achieve. • I'll stay positive – though it sometimes is very hard/self-verbalization is so important • exchange of experiences helped to form inner strategies and "tropicalize" problems • I would like to be able to spend more time on the implementation of the methods. • make implementation possible

Table 19: EFL Teachers' Perceptions of Training Session Six

	Teacher Responses
Content	• it's good to have a look on itself from outside e.g. other group members • Role play was fantastic. • a lot of positive aspects to master school (positive self-verbalizations) • it was very practical; I could observe how I act as a teacher • good to see oneself filmed both for the better and the worse ☺
Usefulness	• Thank you so much, I'm sorry I'm a bit beside me today … • something may be hard to implement on "Hauptschule" • I've practiced a lot today. It will help me in my future work. • makes a positive learning atmosphere/I've found out right from the beginning of the course • I found some solutions for problems in everyday situations • valuable contributions again, the spark has caught fire, two of my groups are working with co-operative principles now. Thanx.

7 List of Figures

8 List of Tables